Matsushima Mycological Memoirs No. 9

[CD-ROM Version, edited in March 2002]

Takashi Matsushima

Contents

Totally 213 pages, composed of 205 pages of text and photomicrographs (fungal serial number from 1236 to 1335 & photomicrographic serial number from 553 to 923), followed by 8 pages of drawing figures (drawing serial number from 851 to 883). The magnifications of both photomicrographs and drawing figures can be verified by a standard scale in page 3.

Acknowledgments

I thank Professor Dr. Ahmad Nawawi, Department of Botany, University of Malaya, for accompanying with me in field works in the University Botanical Garden and Univeristy of Malaya Field Study Centre, Ulu Gombak, in June 1995. I am grateful to the mycologists of the National Collection of Fungi, Pretoria, South Africa, Dr. Cecile Roux, Alice P. Baxter, Elna van der Linde, and Isabel H. Rong, for coming with me in collection trips in South Africa in September 1995.

Amerosympodula T. Matsushima anam.- gen. nov.

Ad Hyphomycetem pertinet.

Hyphae vegetativae non-propiae, hyalinae. Conidiophora vel cellulae conidiogenae (= conidophora non-septata) mononematosa, micronematosa vel semi-macronematosa, ex hyphis vegetativis repentibus lateraliter oriunda, hyalina, simplicia vel ramulis brevibus, supra sympodialiter proliferata, cicatricibus multis planis manifestis praedita, geniculata vel sinuolata. Conidia holoblastogena, solitaria, continua, oblonga, uda, hyalina. Synanamorphosis ignota. Teleomorphosis ignota. **Species typica**: *Amerosympodula malaysiana* T. Matsushima anam.- sp. nov. **Etym**.: *amero-sympodula* = amerospores formed on sympodula.

1236 ***Amerosympodula malaysiana*** T. Matsushima anam.- sp. nov.

HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: CMA cultura exsiccata, MFC-5T143.

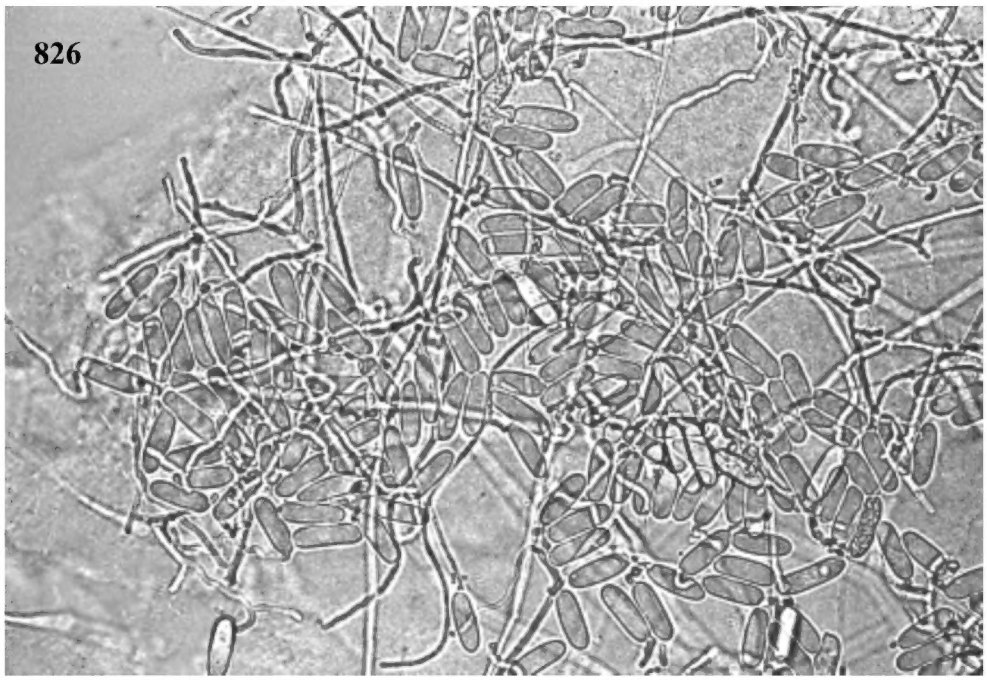
DESCR In CMA: Colonia cito effusa, tenuis, sine hyphis aeriis, aspectu uda, fere incolorata, sporulaltione aequaliter abundanti. Hyphae vegetativae non-prorpiae, ramosae, septatae, solitariae vel funiculosae, frequenter anastomosantes, 1.5-4.5 µm latae, laeves, hyalinae. Conidiophora mononematosa micronematosa vel semi-macronematosa, ex hyphis repentibus lateraliter oriunda, plus minusve aggregata, cylindrica, continua (= cellulae conidiogenae) vel interdum pauci-septata, usque ad 30 µm longa, 1.6-3.0 µm lata, simplica vel ramulis brevibus, supra sympodialiter proliferata geniculata vel sinuolata, cicatricibus multis planis manifestis 1.6-2.5 µm latis praeditla, laevia, hyalina. Conidia holoblastogena, solitaria, oblonga, utrinque rotundata, continua, (14-)18-30 x 6.0-8.5 µm, basi cicatrice vix visibili, laevia, uda, hyalina; frequenter in situ germinantia et inter sese anastomosantia. Conidia veta interdum 1-septata. Synanamorphosis ignota. Teleomorphosis ignota.

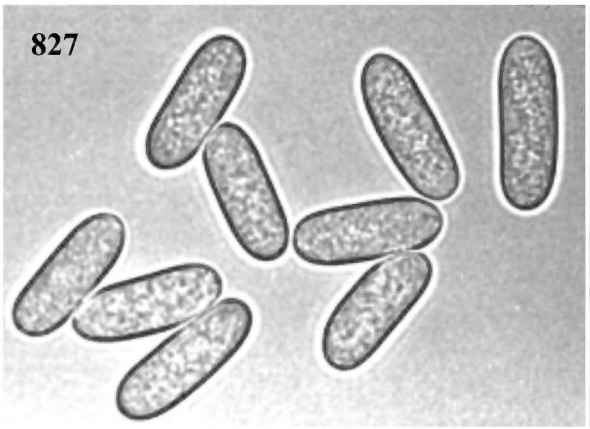
ICO

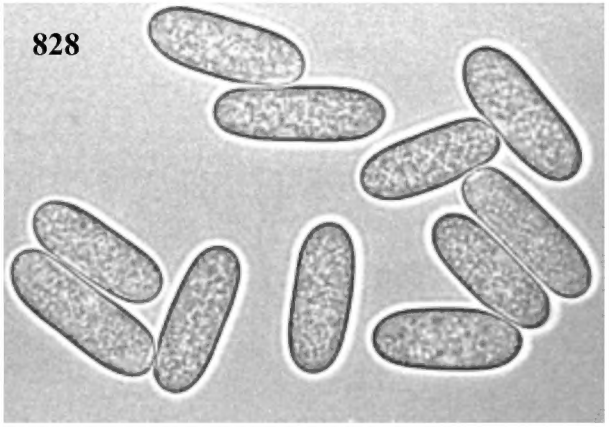
P826: sporulation on CMA, x 400.

P827, P828: conidia, x 1000.

F858: conidiogenous cells, x 1000. (in p. 208)







For verification of magnification

10 cm

1237 ***Articulospora tetracladia*** Ingold, 1942. Trsns. Br. mycol. Soc. **25**: 376.

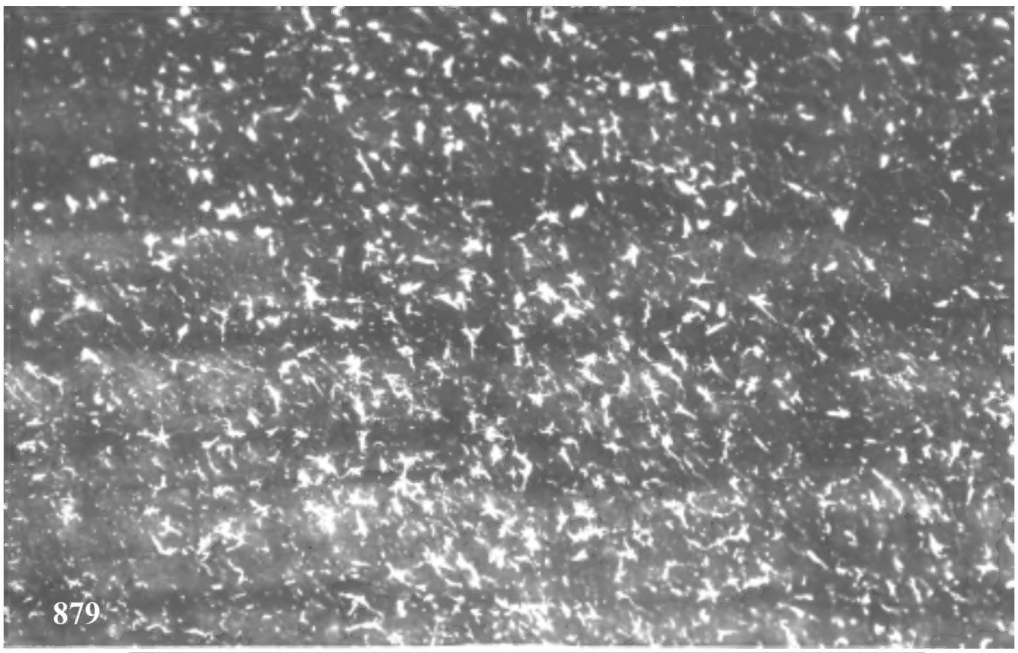
HAB On a dead broad-leaved-tree leaf in stream; near Sparkling Water Hotel, near Rustenburg, South Africa; Sept. 21, 1995. MFC-5A124.

DESCR On CMA: Colonies growing slowly, almost immersed, light orange colored, with good conidiation. Vegetative hyphae branched, septate, smooth, hyaline, 1.3-3.5 µm wide. Conidiophores mononematous, semi-macronematous, irregularly branched, constricted at the septa, producing conidia from the apices of conidiophore-branches in succession in side by side. Conidia blastogenous, smooth, hyaline, composed of a main stem and 1-4, mainly 3 arms which divergently formed at the tip of a main stem and at their bases constricted; main stem 16-25 µm long, 4-5 µm wide, 0-2, mainly 1-septate; arms 20-38 µm long, 4-5 µm wide, 1-3-septate. Frequeltly daughter conidia arising in situ from conidial cells of mother ones, resultantly conidia frequently arranged in shrot chains. No synanamorphosis. No teleomorphosis.

REF Ingold, C. T. 1942. Trans. Br. mycol. Soc. **25**: 339-417 & 6 pls.
Tubaki, K. 1957. Bull. Nat. Sci. Mus. (Tokyo), **3**: 249-268.
Webster, J. & E. Descals. 1981. Biology of Conidial Fungi, Vol. **1**, p. 313.

ICO

P879: sporulation on b/c, x 40.
P882, P883, P884, P885: conidiogenous cells and conidia, x 1000 (phase contrast).
P886: conidia, x 1000 (phase contrast).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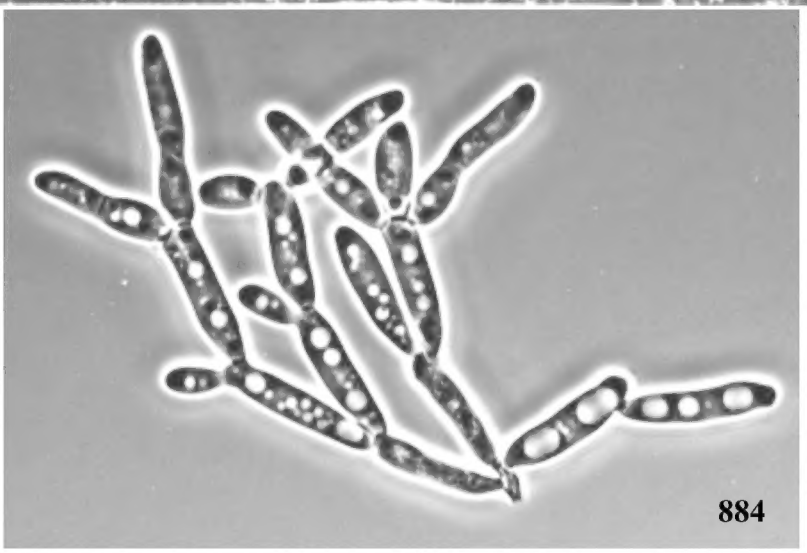
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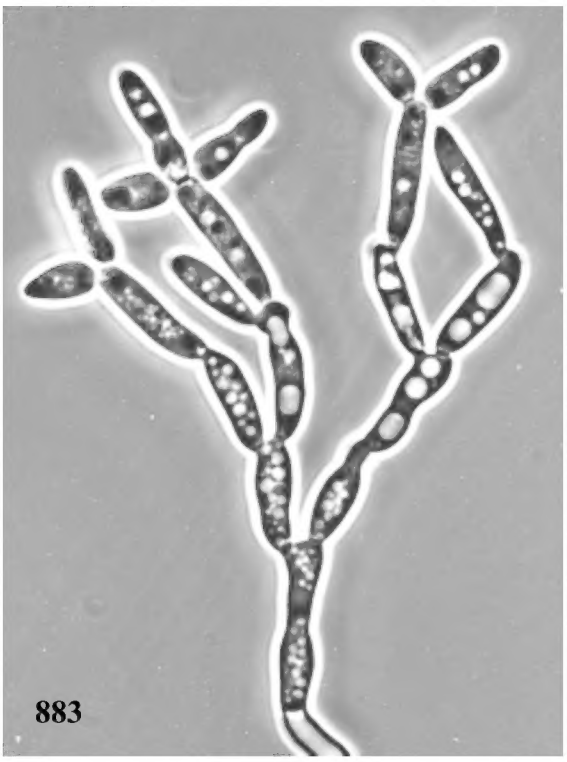
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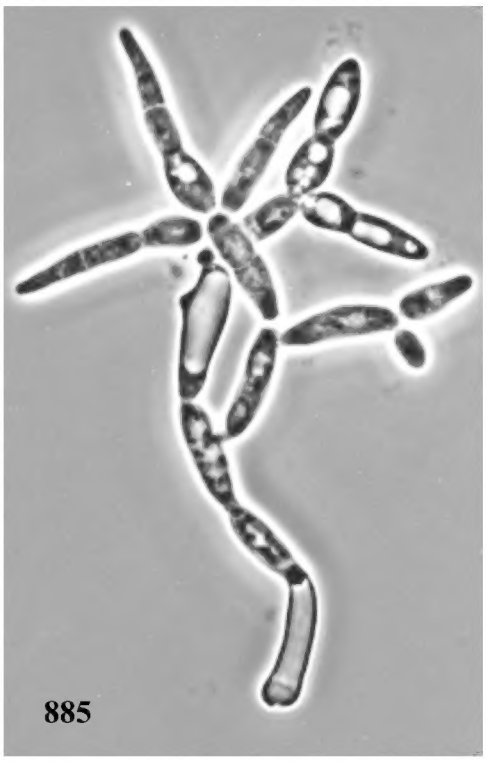
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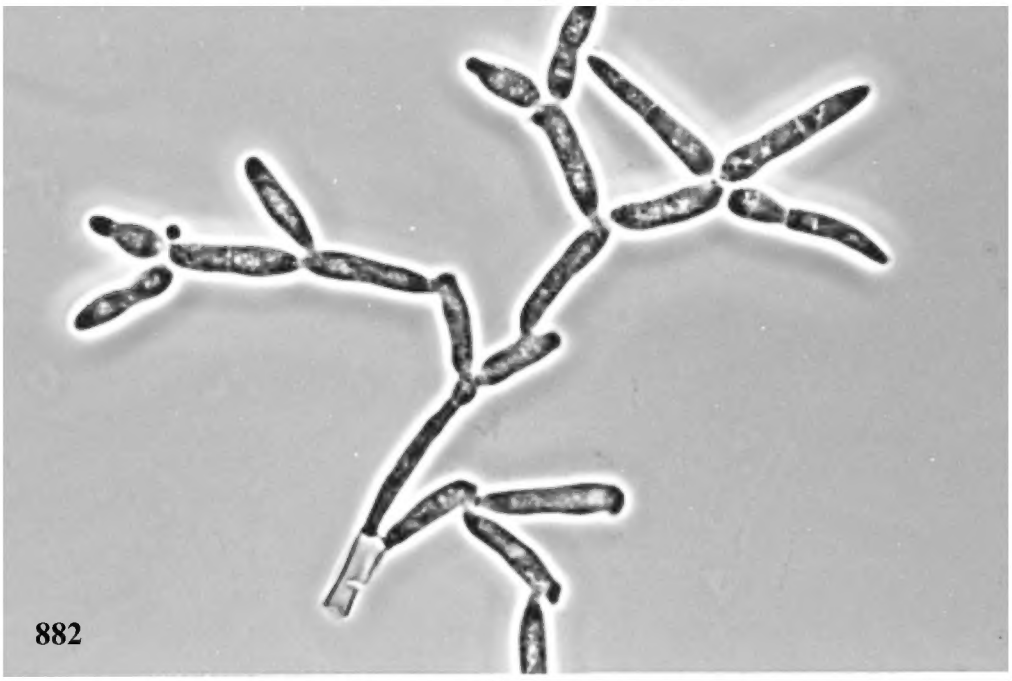

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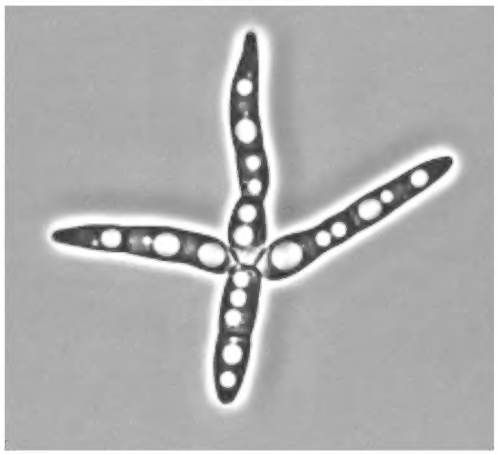

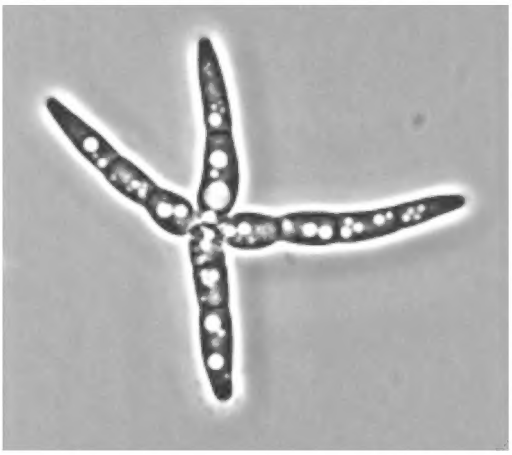

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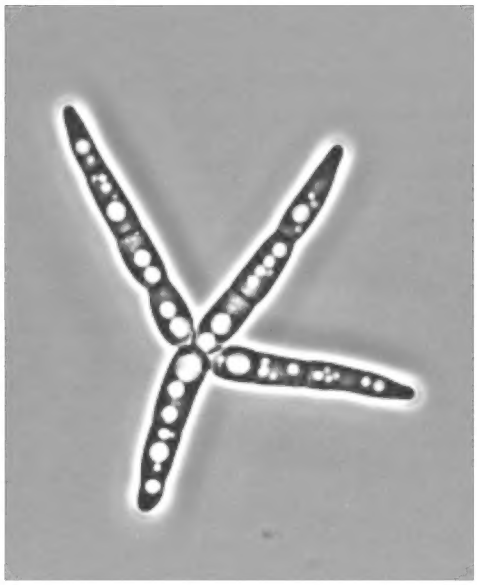


1238 ***Auxarthron zuffianum*** (Morini) Orr & Kuehn, 1963. Can. J. Bot. **41**: 1445-1446.
= = *Gymnoascus zuffianus* Morini, Mem. R. Accad. Sci. Bologna IV, **10**: 205. 1889.
= *Gymnoascus brevisetosus* Kuehn, Mycologia **48**: 813. 1956.
Fide G. F. Orr & H. H. Kuehn. 1963. Mycopath. Mycol. Appl. **21**: 211-216.

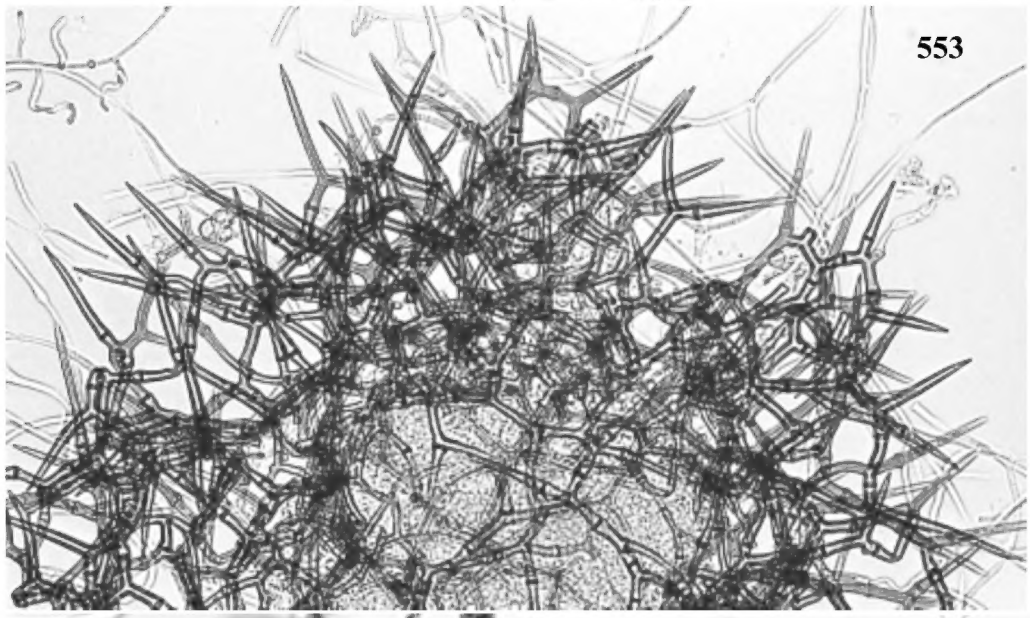
HAB From soil, prope Auroa, South Africa; Sept. 10, 1995. MFC-5K505.

DESCR On CMA: Colonies growing moderately, brownish white. Ascomata gymnothecia superficial or suspended in white short floccose mycelia, aggregated or solitary, globose, brown, 240-470 µm in diam.; peridium composed of septate, cuticularized, asperulate hyphae, with appendages of sharp spines, smooth or asperulate, brown. Asci subglobose 7-9.5 µm in diam. in near matured ones, deliquescing at maturity. Ascospores globose, 2.7-3.5 µm in diam., smooth or inconspicuously rough-walled under light microscope, dry, subhyaline, light brown in mass. Anamorphosis: part of vegetative hyphae disarticulating into arthroconidia, smooth, hyaline, white in mass. Globose cells present, (4.5)6-10 µm in diam., terminal intercalarly or lateral in vegetative hyphae, not thick-walled, smooth, uncolored.

MEM Originally *Gymnoascus brevisetosus* was isolated by Emmons from the lung of a prairie dog in Texas (Mycologia **46**: 334-338. 1954). ** Fide Currah, R. S. 1985 (Mycotaxon **24**: 154), the surface of ascospores is punctate-reticulate by SEM.

ICO

P553: a gymnothecium, CMA, x 400.
P554, P555: spines of gymnothecia, x 1000.
P556: ascospores in a squashed gymnothecium, x 1000.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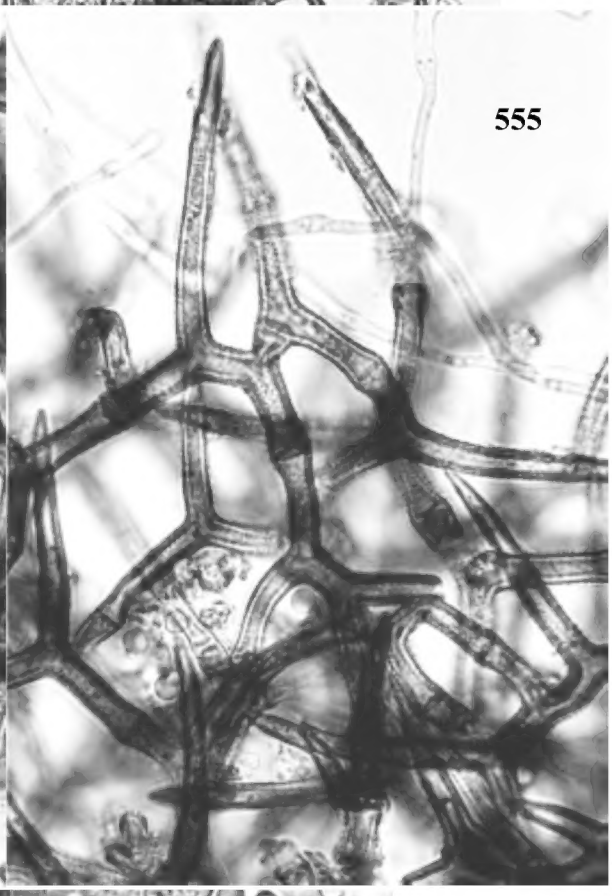
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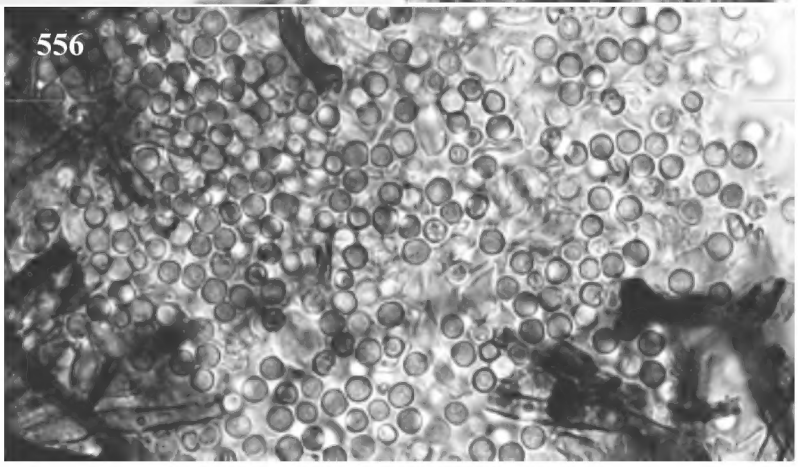

556

Blastofusarioides T. Matsushima anam.- gen. nov.

Ad Hyphomycetem pertinet.

Conidiophora micronematosa, mononematosa. Cellulae conidiogenae in hyphis vegetativis repentibus intercalariter incorporatae, lateraliter mono vel polyblasticae. Conidia solitaria, forma similia *Fusarium*, magnitunine variabilia, subhyalina ad pallide colorata, mucosa in massa; communiter in situ conidio filiae interdum conidio grandifiliae producentia. **Etym.**: *blasto-fusarioides* = *Fusarium*-like conidia formed blastogenously. **Species typica**: *Blastofusarioides fusca* T. Matsushima anm.- sp. nov.

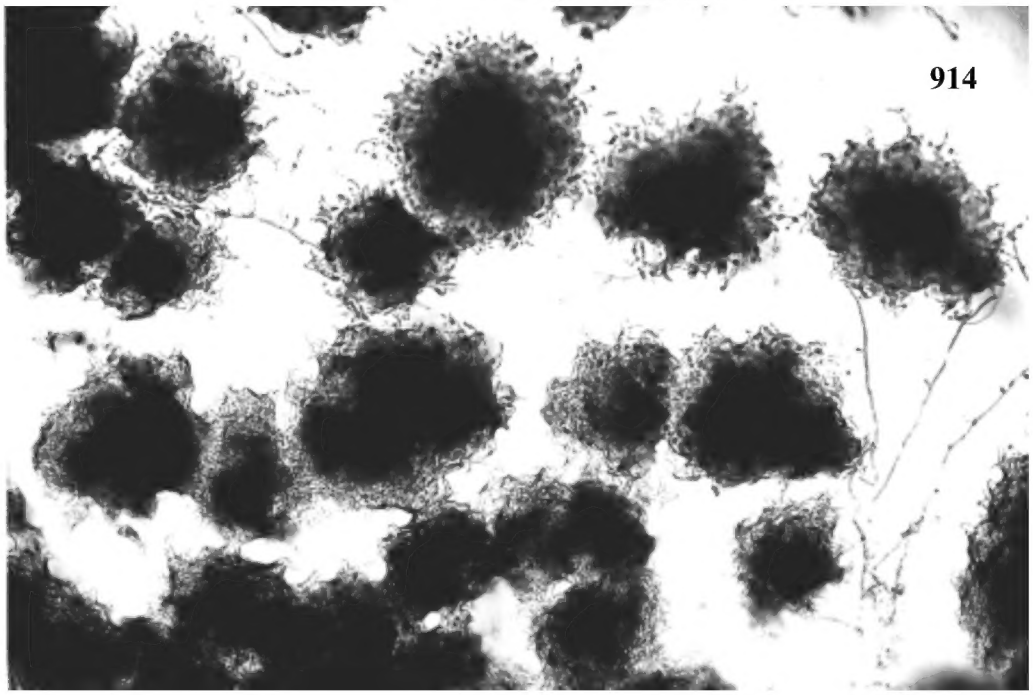
1239 ***Blastofusarioides fusca*** T. Matsushima anam.- sp. nov.

HAB In folio putrescenti arboris latifoliae; Shigi-san, Osaka Pref., Japan; April 7, 1995. **Typus**: CMA cultura exsiccata, MFC-5H186. **Etym.**: *fusca* = colony brownish gray colored.

DESCR In CMA: Colonia tardissime crescens, sine hyphis aeriis, atro-fusca, uda vel mucosa, margine restricta. Hyphae vegetativae ramosae, septatae, ad septa non vel constricta, frequenter ad septa facile disarticulatae, laeves, subhyalinae ad modice fuscae. Conidiophora micronematosa. Cellulae conidiogenae in hyphis vegetativis repentibus intercalariter incorporatae, lateraliter mono- vel poly-denticulis fertilibus. Conidia solitaria, forma similia *Fusarium*, magnitudine variabilia, 15-80 µm longa, 2.5-7.0 µm lalta, 1-11-septata, ad septa non vel leviter constricta, laevia, subhyalina ad modice fusca, fusca mucosa in massa; conidia communiter in situ conidio filiae interdum conidio grandifiliae producentia.

ICO P914, P923: colonies on CMA, x 100.

F883: vegetative hyphae, conidiogenous cells and conidia, showing shape size and septation only, CMA, x 1000. (in p. 213)



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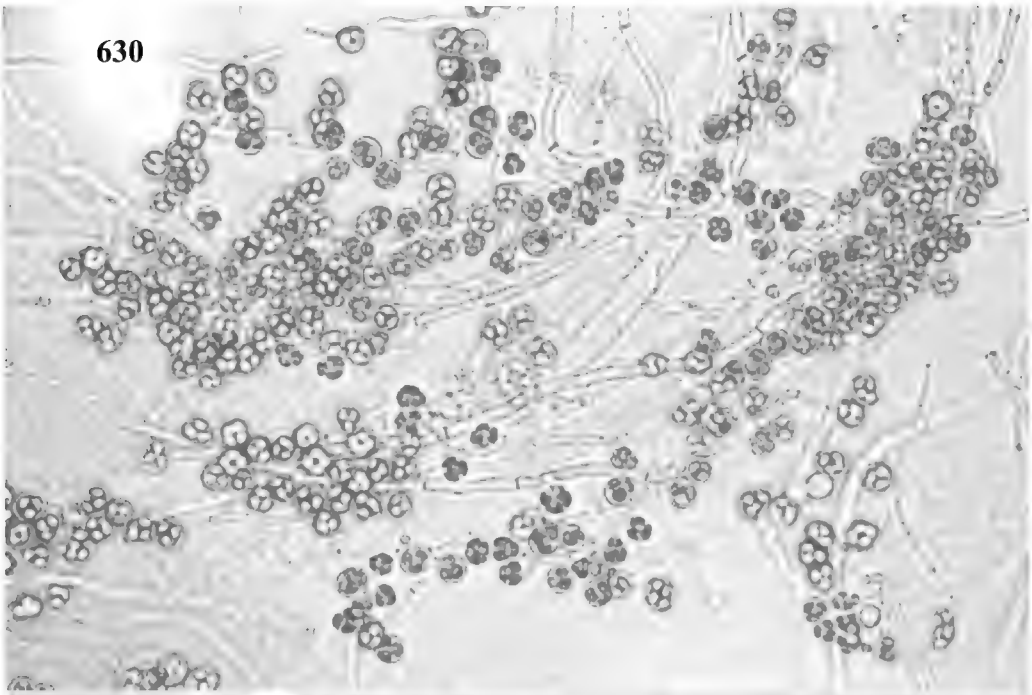
1240 ***Botryoascus nipponicus*** T. Matsushima sp. nov.
Anamorphosis: *Hyalodendron* sp.
HAB Ut aerospora: Osaka City, Japan; Jan. 1996. **Typus:** CMA cultura exsiccata, MFC-6J001.
DESCR In CMA: Colonia tenuiter effusa, hyphis aeriis sparsis, pallide brunnea. Hyphis vegetativis filamentosis, ramosis, septatis, septis simplicibus, ad septa non constrictis, laevibus, hyalinis, 1.5-4.5 µm latis. Cellulae pullulantes vel findentes deficientes. Asci dense dispersi, in agaro immersi, frequenter aggregati, globosi ad obovati, nudi, directe in hyphis vegertativis oriundi vel 1-3 botryoides in ramulis lateralibus brevibus, generatim solitarii, interdum 2-3 catenati et in successione basipetali maturescentes, sessiles vel brevissime stipitati; (2-)4 ascospori, 7.5-10 µm in diam. in ascis 4-sporis, 6.5 µm in diam. in ascis 2-sporis, in statu maturo persistentes. Ascosporae lenticulares 3.5-4.8 x 2.8-3.8 µm aspectu laterali, circulares aspectu apicali, laeves, hyalinae, cristis duabus aequatorialibus acutis inaequalibus (ca. 1 µm et ca. 0.5 µm altis) parallelibus praeditae.
Anamorphosis: *Hyalodendron*. Superficiale, aequaliter dense dispersum. Conidiophora simplicia, cylindrica; ramoconidia magnitudine variabilia, solitaria vel catenata; conidia oblonga ad obovata, 4-8 x 2.5-4 µm, laevia, hyalina, solitaria vel breviter catenata.
REF Arx, J. A. von. 1972. Antonie van Leeuwenhoek, **38**: 289-309. => A new monotypic genus *Botryoascus* von Arx. Type species: *Botryoascus synnaedendrus* (Scott & van der Walt) von Arx, (= = *Saccharomycopsis synnaedendra* Scott & van der Walt, in Mycopath. Mycol. Appl. **44**: 102. 1971. / = *Pichia microspora* Batra in Mycologia **63**: 998. 1971 (as a new monotypic genus). ** Martinez, A. T., Gonsales, A. E., Abarca, L., & Cabanez, J. 1990. Can. J. Bot. **68**: 1738-1740. A new *Botryoascus* from the air of a poutry farm. => *Botryoascus cladosporioides* n. sp., the second species.
ICO P630: asci on CMA, x 400.
P631, P632: young asci, x 2000.
P633, P634, P635, P636, P637, P638, P639, P640, P641: mature asci and ascospores, x 2000.
P642: *Hyalodendron*-anamorph, CMA, x 1000.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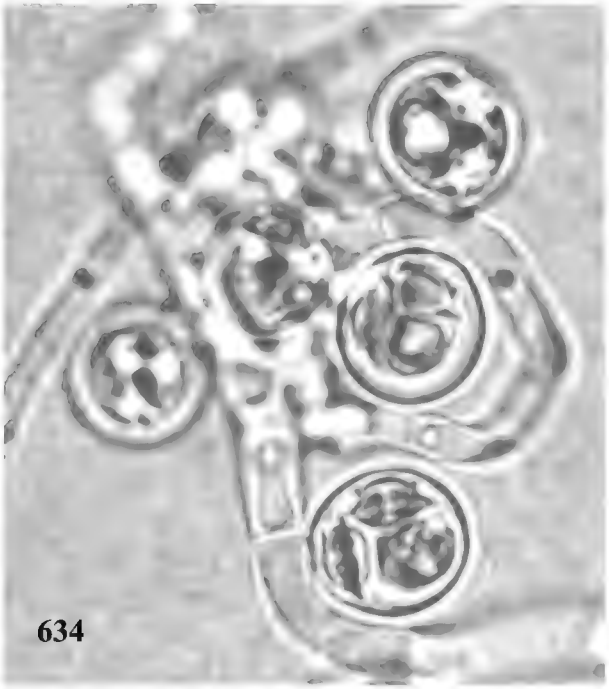
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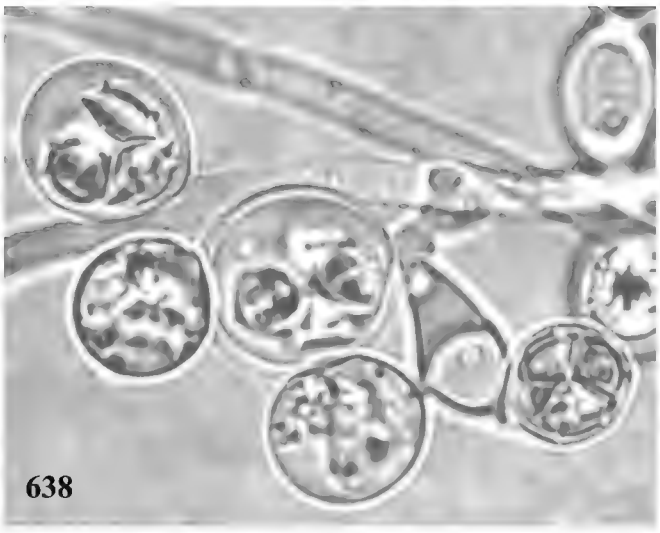
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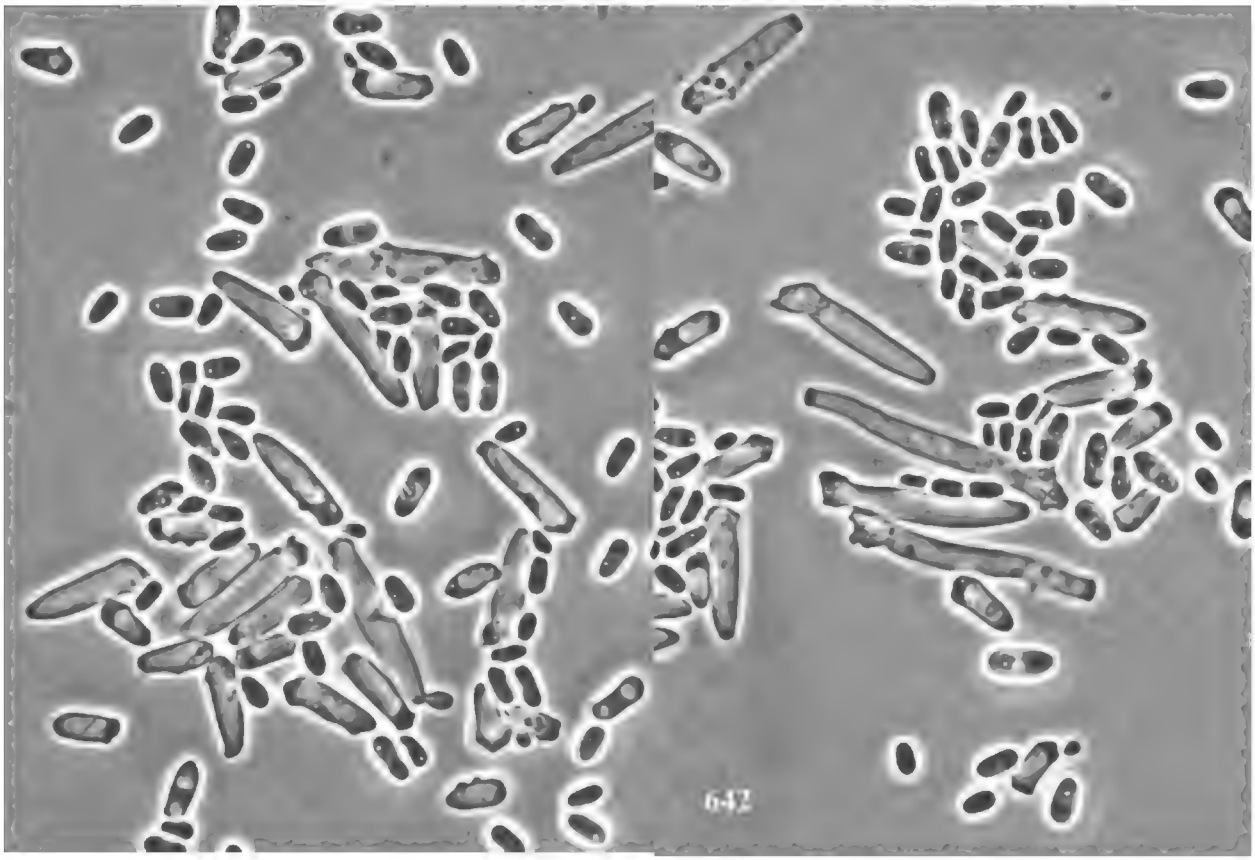


642

Bulbilopycnis T. Matsushima anam.- sp. nov.

Ad Coelomycetem pertinet.

Pycnidia superficialia, sunt dictyo-thallosporae, plus minusve globoidea, brunnea; initio sunt cellulae hypharum singulares terminales, tum meristogena expansa, interne non cava, cellulis pseudo-parenchymatosis subhyalinis, postea in centro cellulae pseudoparenchymatosae cellulas conidiogenas transformatae, non ostiolata maturitatem refringentia; peridio aspectu superficiali cellulis angularibus pallide brunneis frequenter in parte carbonaceis. Conidiophora deficeintia. Cellulae conidiogenae ampulliformes ad doliiformes, hyalinae, enteroblasticae-phialidicae. Pycnidioconidia continua, hyalina. Synanamorphosis: Hyphomycetes. Teleomorphsis ignota. **Etym**.: *bulbilo-pycnis* = bulbil like pycnidia. **Species typica**: *Bulbilopycnis cafferea* T. Matsushima.

1241 ***Bulbilopycnis caffera*** T. Matsushima anam.- sp. nov.

HAB In folio mortuo arboris latifoliae in rivulo; prope Sparkling Water Hotel, prope Rustenburg, South Africa; Sept. 21, 1995. **Typus**: CMA exsiccata, MFC-5A120.

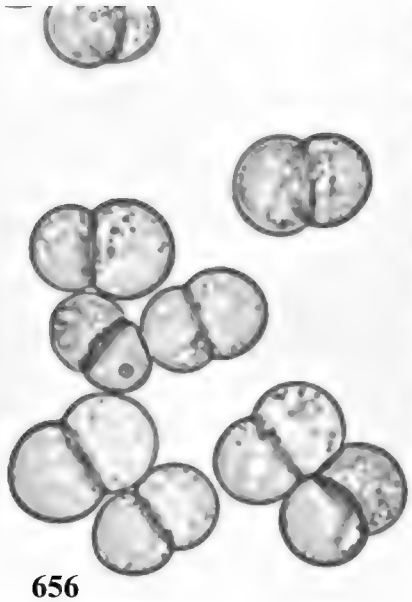
DESCR In CMA: Colonia modice crescens, fere immersa, brunnea, margine restricta, sporulatione in inocula (PDA) atque circum inoculum. Hyphae vegetativae ramosae, septatae, 1.5-3.4 µm latae, laeves, pallide brunneae.

Coelomycete-forma: Pycnidia abundantia, superficialia, plus minusve globoidea, dictyo-thallosporae, brunnea, Hyphomycete-forma mixta; initio cellulae hypharum singulares terminales, tum meristogena expansa, magnitudine variabilia 14-53 µm in diam., interne non cava cellulis pseudoparenchymatosis subhyalinis, postea in centro cellulae pseudoparenchymatosae cellulas conidiogenas transformatae, non ostiolata, ad maturitatem refringentia; peridio aspectu superficiali cellulis angularibus pallide brunneis frequenter in parte carbonaceis. Cellulae conidiogenae ampulliformes, hyalinae, enteroblasticae-phialidicae. Pycnidioconidia allantoidea, recta vel leviter curva, 3-5 x 0.7-1.0 µm laveia, hyalina.

Hyphomycete-forma: Conidiophora praecipue deficientia vel ubi praesentia cylindrica, usque ad 20 µm longa, 2-3 µm lata, laevia, pallide brunnea. Cellulae conidiogenae e hyphis vegetativis lateralitrer directe oriundae vel in conidiophoris terminaliter integratae, cylindricae, 3-10 µm longae, supra basim 2-3 µm latae, sub apicem 2.5-3.5 µm latae, apice holoblasticae determinatae vel semel praecipue percurrenter vel interdum sympodialiter proliferatae, laeves, pallide brunneae. Conidia solitaria, plus minusve 8-formia, e 2 cellulis subglobosis aequalibus vel inaequalibus constantia, ad septum profunde constricta, 14-25 µm longa, 10-18 µm lata, cicatrice basali vix visibili, laevia, modice brunnea. Teleomorposis ignota.

MEM In the two anamorphoses of this species, Coelomycete-anamorphosis was more abundant and seems to be more persistent in successively transferred cultures. ** "*Asteromella*-like" anamorphosis of *Tubeufia amazonensis* Samuels, Rossman & Mueller (in Sydowia **31**: 186. 1978) has some similarity to the present new taxon.

ICO P656: conidia, CMA, x 1000.
P657, P658 (phase contrast), P659, P660: pycnidia, CMA, x 1000.
F860: conidiophores, conidiogenous cells and conidia, CMA, x 1000. (in p. 208)
F861: pycnidial initials, CMA, x 1000. (in p. 208)
F862: mature pycnidia, CMA, x 1000. (in p. 208)



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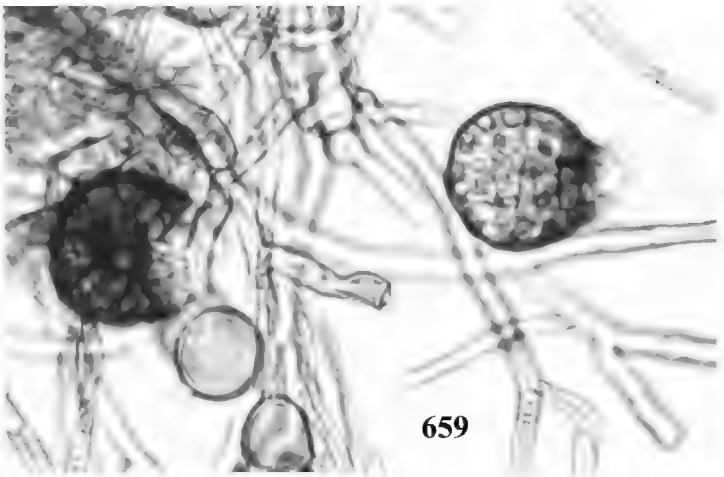

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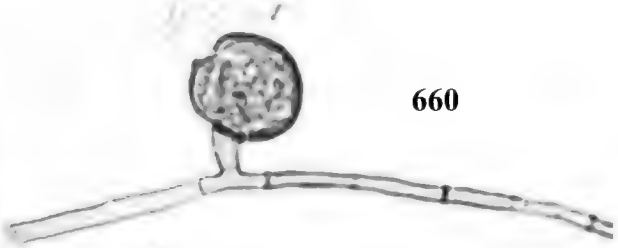

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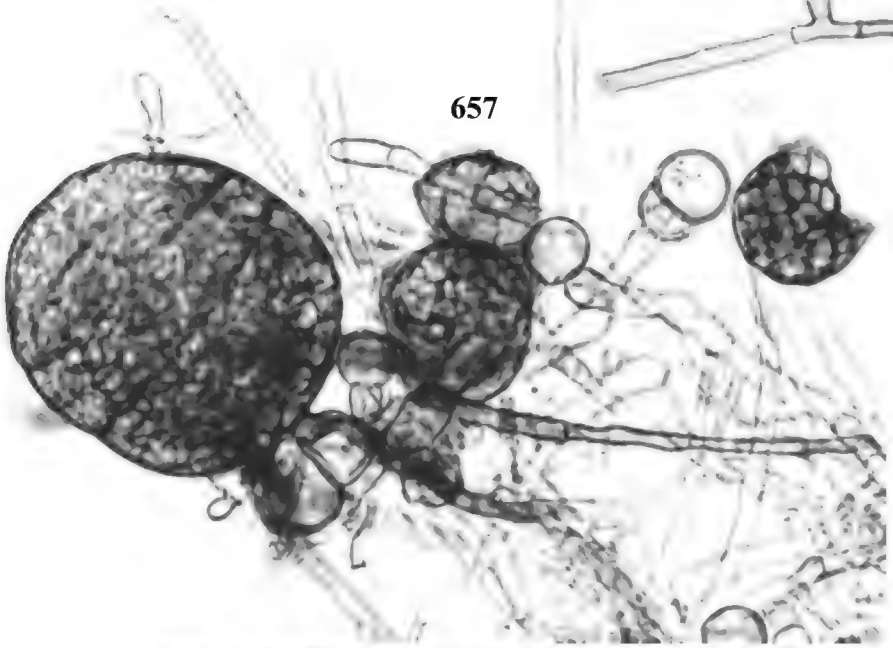
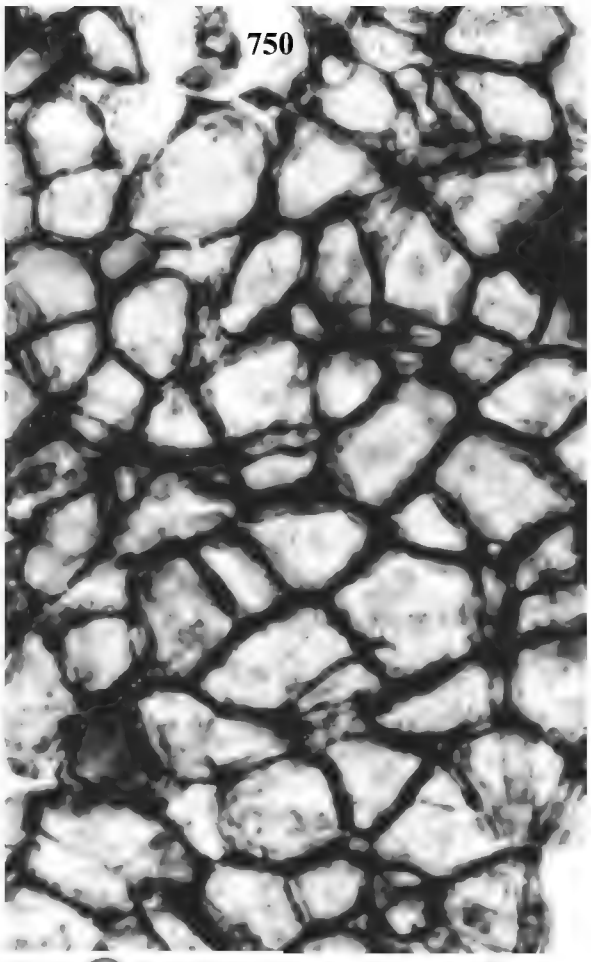


1242 ***Camarosporium microsporiferum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: b/c cultura exsiccata, MFC-5A161. **Etym.**: *microsporiferum* = having microconidia.
DESCR In b/c: Colonia effusa, hyphis aeriis brunneis sparsis. Pycnidia fere superficialia interdum semi-immersa, aequaliter dispersa, forma atque magnitudine variabilia, globosa ad late obclavata, 100-300 µm lata 65-215 µm in diam., collo breviter cylindrico, atro-brunneo, ad ostiolum setis cylindricis simplicibus laevibus 25-100 µm longis 3-6 µm latis sursum non vel leviter attenuatis continuis vel pauci-septatis brunneis. Peridium membranaceum, aspectu superficiali cellulis angularibus complanatis brunneis in parte carbonaceis; parte interiore pseudoparenchymatosum pallidum. Conidiophora deficientia. Cellulae conidiogenae sunt cellulae peridii intimae, ampulliformes, basi 5-10 µm latae 5-8 µm altae, apice 2.5-4 µm latae enteroblasticae-phialidicae vel interdum collo cylindrico 2-3 µm lato percurrenter poly-phialidico. Conidia (Macroconidia) muriformia, 10-18 x 7-12 µm, cicatrice basali statu maturo non visibili (truncata in conidia juvenibus), laevia, brunnea. Microconidia (non macroconidia juvenia) macroconidiis mixta, unicellulalria, subglobosa oblonga ad subangularia, 4-5.5 µm in diam. vel 5-7.5-2.5-4 µm, laevia, hyalina. In CMA: Colonia modice crescens, fere immersa fusca, pycnidiis ateris superficaliter dispersis, circumferentia lata diffusa incolorata.
ICO P748: a pycnidium squashed, b/c, x 400.
P749: a pycnidium squashed, CMA, x 200.
P750: peridium in surface view, b/c, x 1000.
P751, P752: conidia, b/c, x 1000.

748

750



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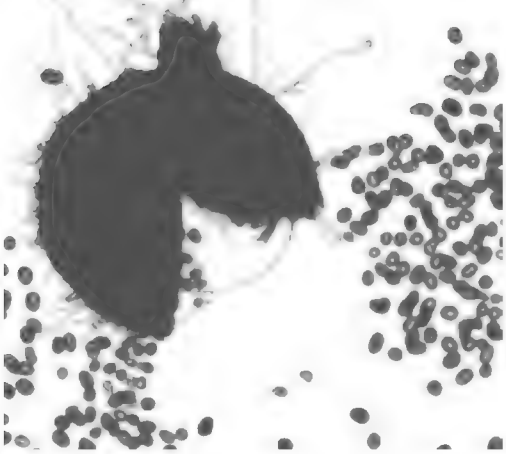

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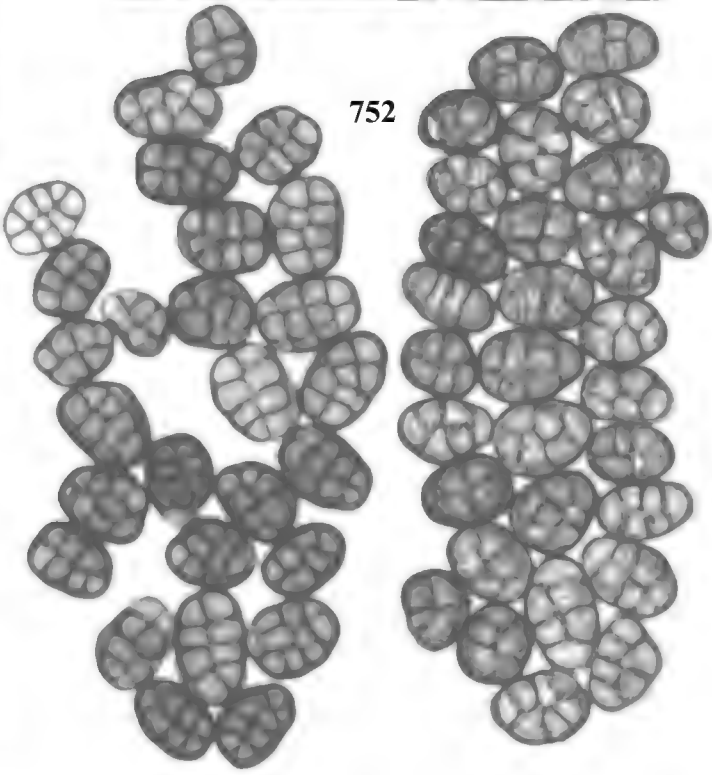

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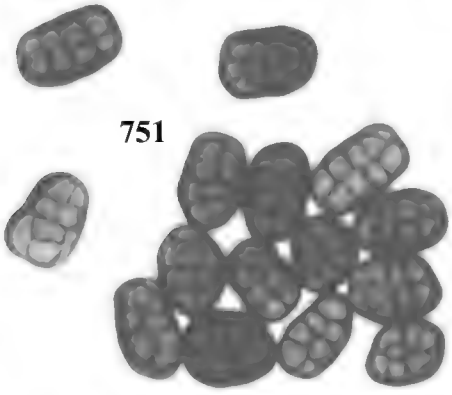
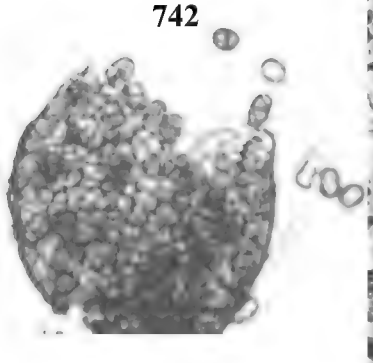


1243 ***Camarosporium cruciseptatum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: CMA cultura exsiccata, MFC-5A050. **Etym.**: *cruciseptatum* = many conidia cruciately septate.
DESCR In CMA: Colonia modice expansa, pallide roseola, margine diffusa subhyalina. Hyphae vegetatrivae ramosae, septatae, non-propiae, hyalinae. Pycnidia solum in inoculis et circum inocula (ex PDA) formata. Pycnidia dispersa, plus minusve globosa, 50-150 µm in diam., atera, non-ostiolata, maturitatem refringentia; peridium aspectu superficiali textura angulari pallide brunneum, in parte subcarbonaceum. Conidiophora deficientia. Cellulae conidiogenae sunt cellulae perdii intimae, subglobosae vel ampulliformes, 4.5-8.0 µm altae 5.0-7.5 µm latae, apice angustatae enteroblasticae-phialidicae, ore intrinsecus inconspicue incrassato vel percurrentes-polyphialidicae, subhyalinae. Conidia subglobosa ad oblonga, 9-14 x 7.5-9.0 µm, cruciate vel irregulariter septata, basi cicatrice inconspicua, laevia, pallide brunnea, atera mucosa in massa. Teleomorphosis ignota.
MEM The present species has some similarity to the followings: *Camarosporium cruciatum* (Fuck.) Sacc., in Syll. fung. **3**: 464. 1884. / *Camarosporium aequivocum* Sacc., in Grove (1937), p. 91-92. / *Camarosporium oreades* (Fr. apud Duby) Sacc., in Ellis & Ellis, 1985. Microfungi on land plants, p. 210. / *Camarosporium saturophragmium* F. Tassi, in Bull. Lab. Art. Bot. Siena, 1900: 20; Batista, A. C., & G. E. P. Peres. 1965. Mycopathologia **25**: 144-160.
ICO P742: a pycnidium, CMA, x 400.
P743: peridium in surface view, x 1000.
P744, P745: conidiogenous cells, x 2000.
P746, P747: conidia, x 1000.

742



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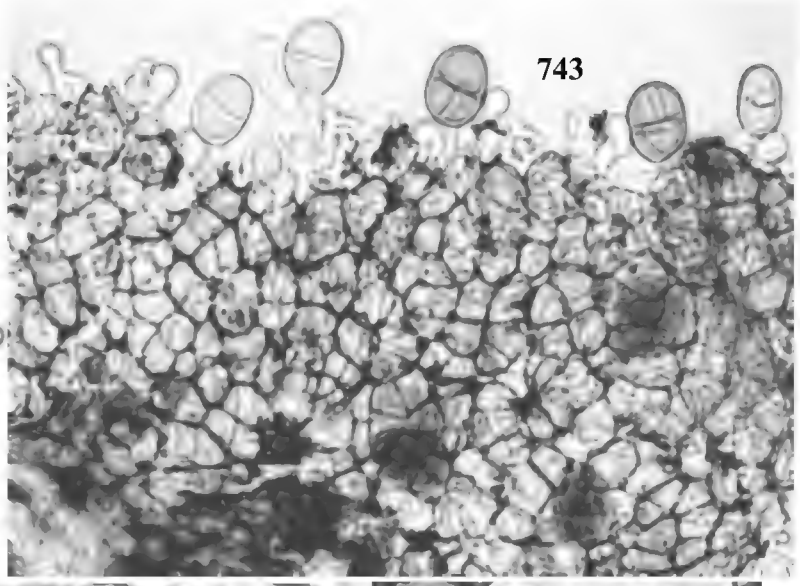

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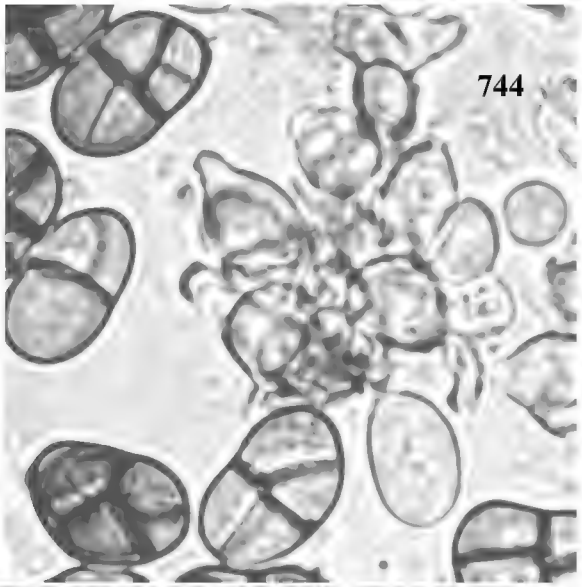

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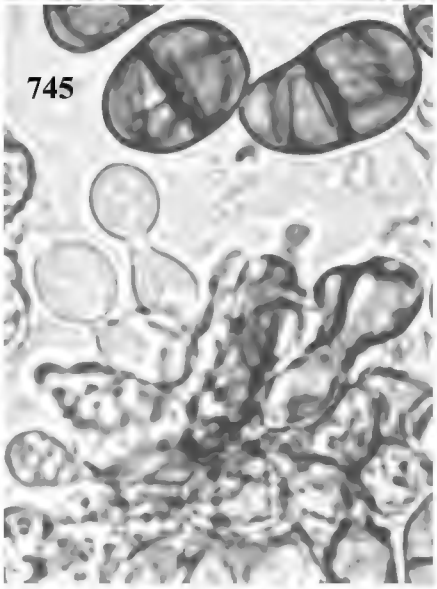

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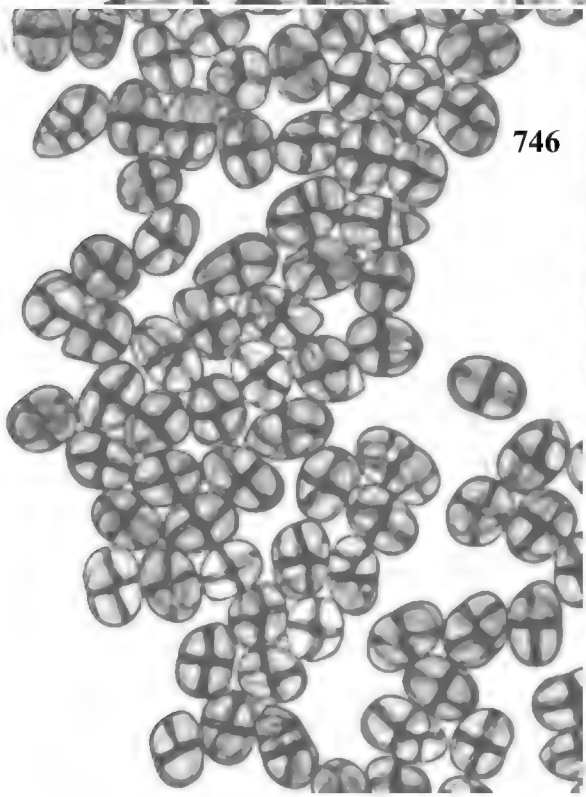

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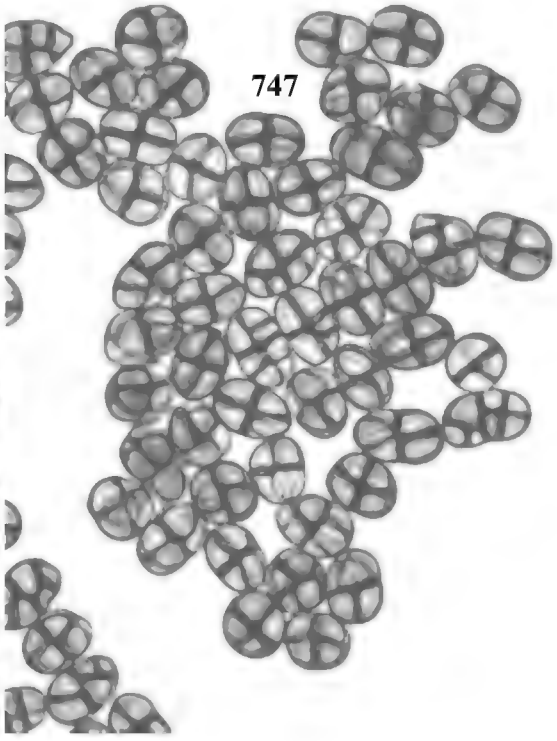


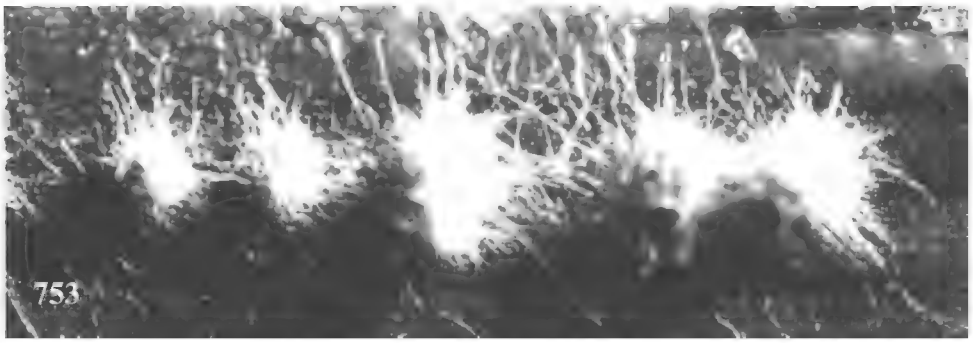
1244 ***Camarosporium propinquum*** (Sacc.) Sacc., Syll. fung. **3**: 464-465. 1884.
= = *Hendersonia propinqua* Sacc., Michelia **1**: 516. 1879.
= *Coryneum populi* Oud., Nederl. kruidk. Archf., ser.3, **1**: 510. 1898.
= *Camarosporium populi* Oud., Verh. k. Akad. Wet., ser. 2, **11**: 541. 1904.

HAB On a rotten twig; near Kuruman, South Africa; Sept. 8 1995, MFC-5A092.

DESCR On b/c: Colonies spreading, with scant aerial hyphae, with scattered small black pycnidia. Pycnidia dispersed, semi-immersed, subglobose to obpyriform, 150-400 µm in diam., with a papillate ostiole, dark brown, frequently covered with white ordinary vegetative hyphae; wall light brown membranous, outer layer composed of pale brown angular flattened cells and inner layer subhyaline and composed of pseudoparenchymatic cells; conidiophores lacking; conidiogenous cells the inmost cells of the peridium, enteroblastic-phialidic or percurrent-polyphialdic with an elongating neck, hyaline. Conidia oblong-ellipsoidal, muriform, more or less variable in septation, with (0-)1-3 transverse septa, typically 3-septate, 10-16 µm long in total range, 12-16 µm long in 3-septat ones, 5.5-8.0 µm wide, 2-central cells frequently with 1 longitudinal or more or less oblique septum, the basal scar not visible, smooth-walled, brown, black mucous in mass. On CMA: Colonies thinly spreading subhyaline, light brownish gray around inocula (PDA). Small number of pycnidia formed on and around inocula. Pycnidia mostly immersed, obpyriform, ostiolate, 185-440 µm in diam., dark brown.

REF Saccardo, Syll. fung. **3**: 459-470. 1884. => 53 spp. of *Camarosporium* described. ** Grove, W. B. 1937. British stem- and leaf-fungi, II: 90-107. ** Sutton, B. C. 1975. Mycol. Pap. C.M.I. **138**: 161-163. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I., Kew. p. 123-127.

ICO P753: pycnidia, covered with white vegetative hyphae, on b/c, x 40.
P754: peridium in surface view, x 1000.
P755: conidia, x 1000.
P756: a pycnidium, squashed, CMA, x 200.
P757: section of a pycnidium, showing inner pseudoparenchymatous tissue and conidiogenous cells, x 1000.
P758, P759: conidia, x 1000.



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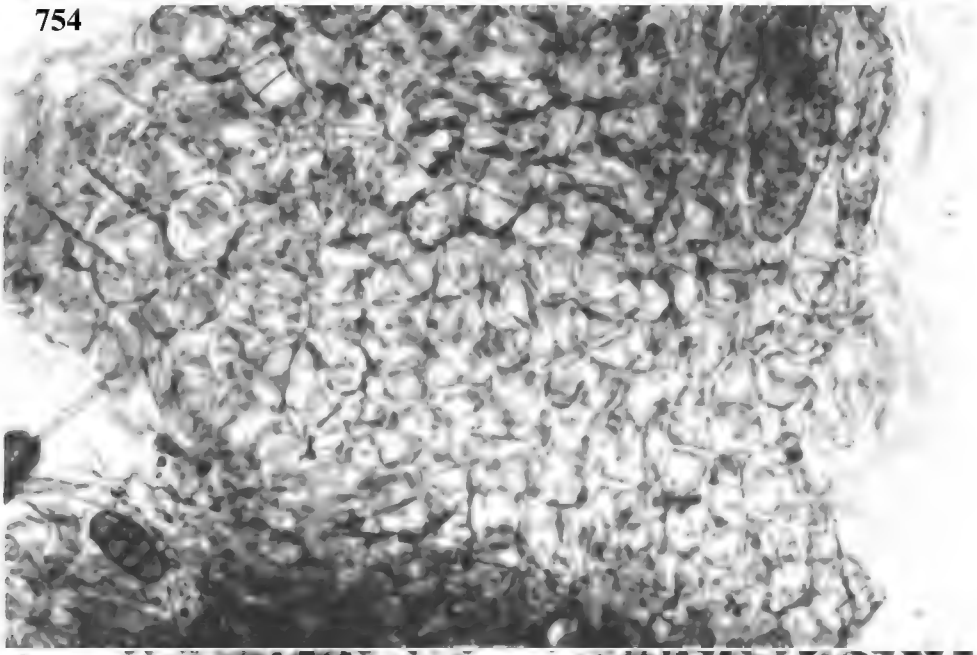

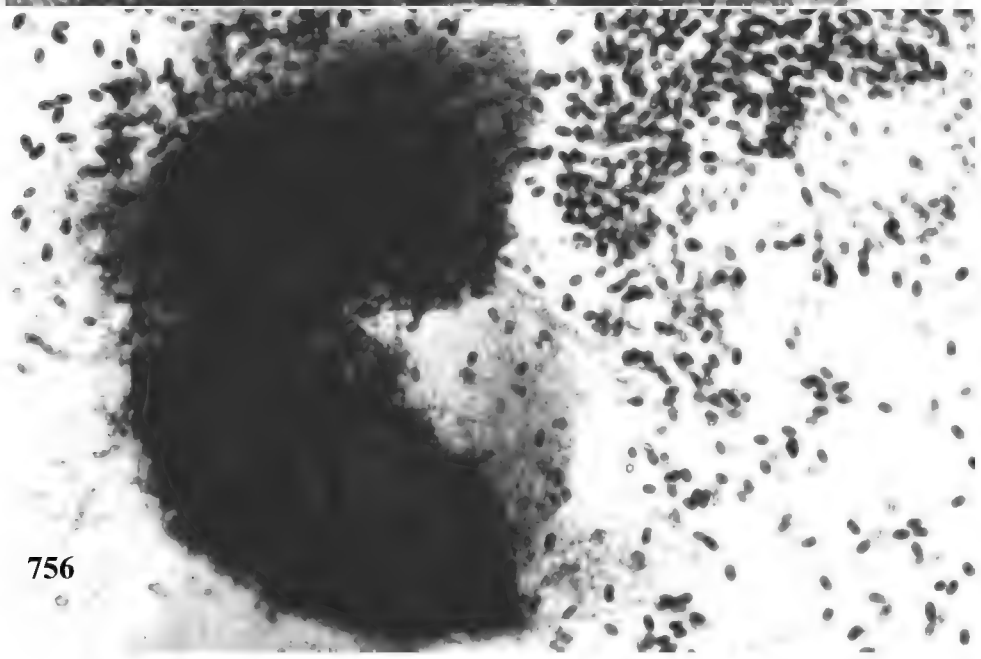

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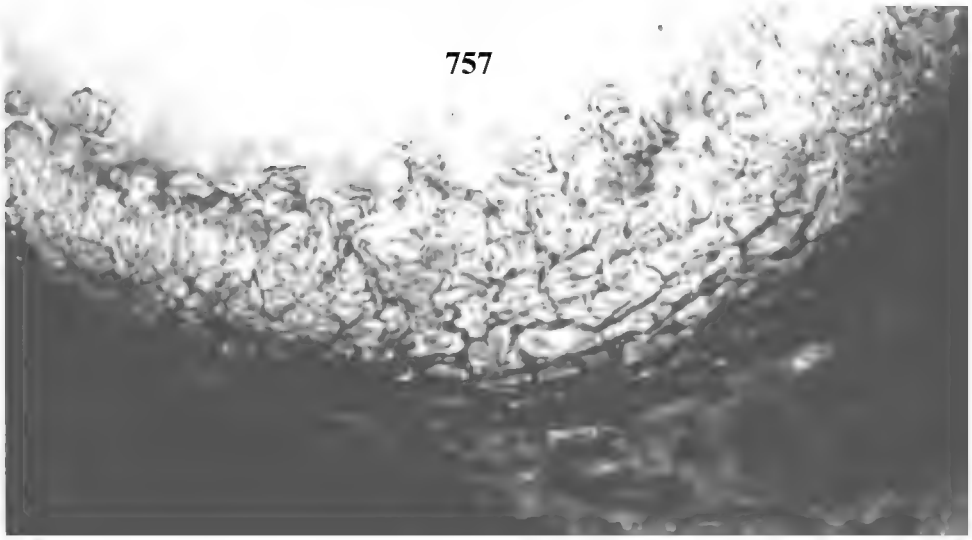

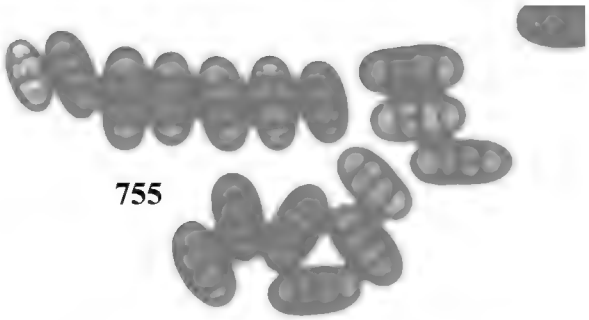

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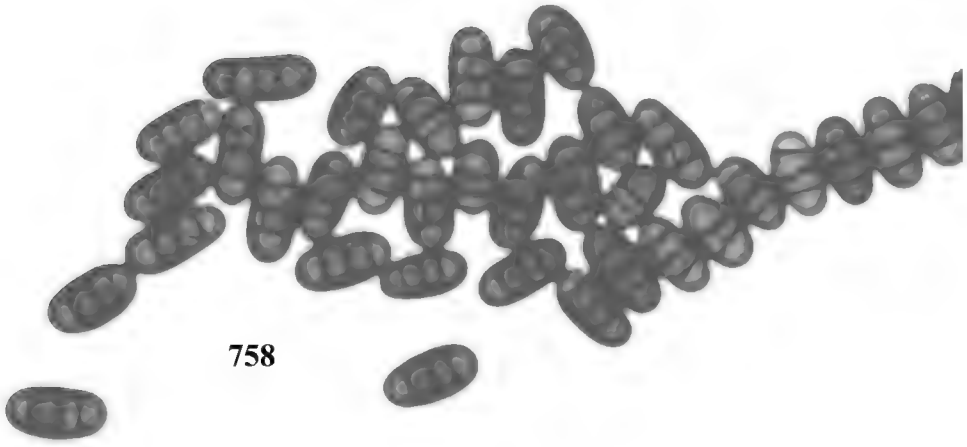

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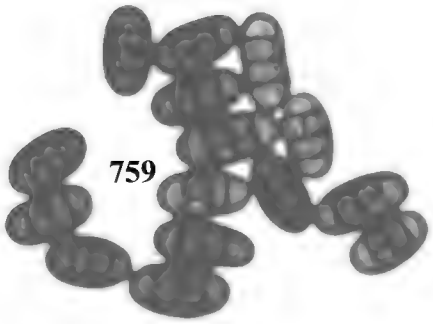
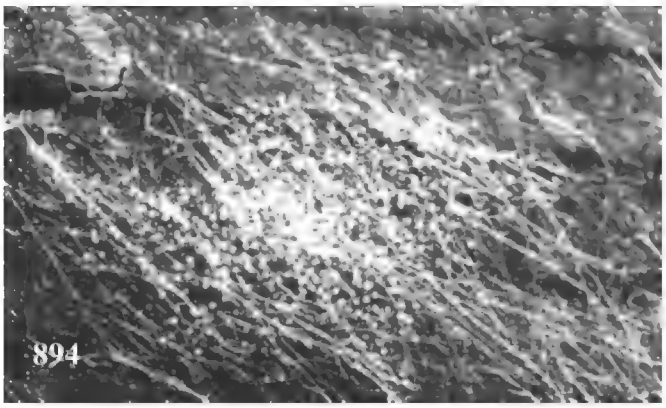


759

1245 ***Camposporium antennatum*** Harkness, 1884, Bull. Calif. Acad. Sci. **1**: 37-38.
HAB On a rotten twig in stream; near Sparkling Water Hotel, near Rustenburg, South Africa; Sept. 21, 1995. MFC-5A141.
REF Mats. Myc. Mem. **1**, no. 28. 1980. ** Mats. Myc.Mem. **3**, no. 311. 1983. ** Mats. Myc. Mem. **6**, no. 588. 1989. ** Mats. Myc. Mem. **7**, no. 801. 1993.

1246 ***Camposporium cambrense*** Hughes, 1951, Mycol. Pap. **36**: 11.
HAB On a dead *Quercus* leaf in stream; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A044.
REF Mats. Myc. Mem. **5**, no. 462. 1987.

1247 ***Candelabrum macrosporum*** T. Matsushima anam. - sp. nov.
HAB In folio mortuo arboris latifoliae in rivulo; prope Sparkling Water Hotel, prope Rustenburg, South Africa; Sept. 21, 1995. MFC-5A121.
DESCR Persimile *Candelabrum spinulosum* Beverwijk atque *Candelabrum japonense* Tubaki, sed differens solum in magnitudine conidiali. In CMA: Conidiophora mononematosa micronematosa; cellulae conidiogenae cylindricae, terminales, apice monoblasticae, determinatae. Conidia aspectu apicali subcircularia vel subquandrilateralia, 20-36 µm in diam. circumscriptionis, aspectu laterali 14-25 µm alta, sicca, alba in massa.
MEM *Candelabrum spinulosum* Beverwijk, Ant. v. Leeuwenh. **17**: 283-284. 1951. The generic type species, originally monotypic. The conidia in top view 12-15 µm in diam., in side view 12-15 x 7.5-10 µm, by Beverwijk (loc. cit. supra); and the conidia in apical view 10-13 µm in diam. in lateral view 6.8-8.6 µm high, by Gamundi, I. J., et al. in Darwiniana **21**: 81-114. 1977. ** *Candelabrum japonense* Tubaki, J. Hattori Bot. Lab. **20**: 149-150. 1958. => Conidia in top view 18-23(-25) µm in diam., 18-20 x 13-15 µm in side view.
ICO P894: sporulation on b/c, x 40.
P895, P896, P857: conidia, x 2000.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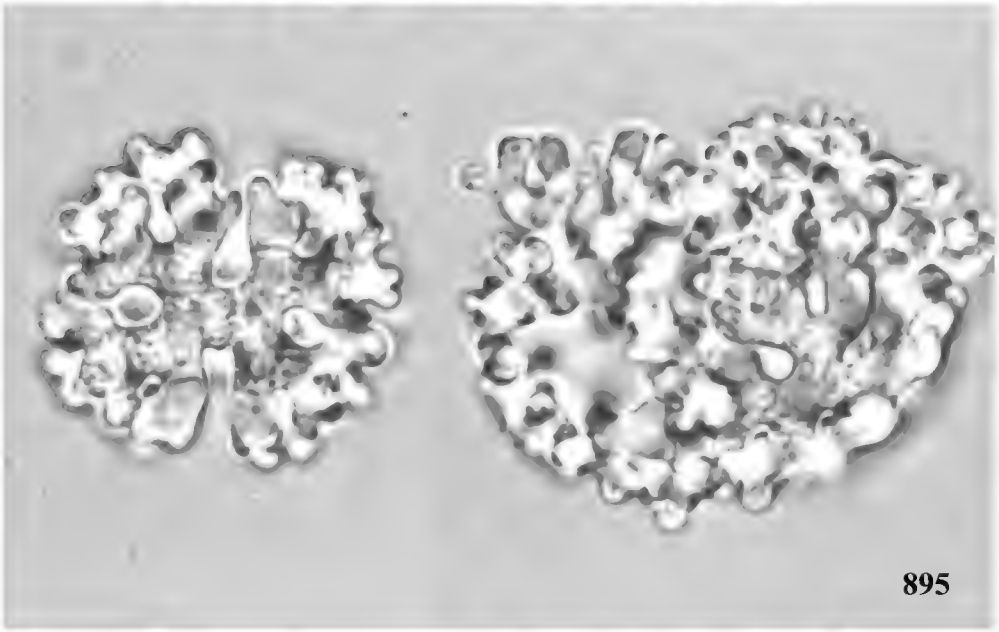
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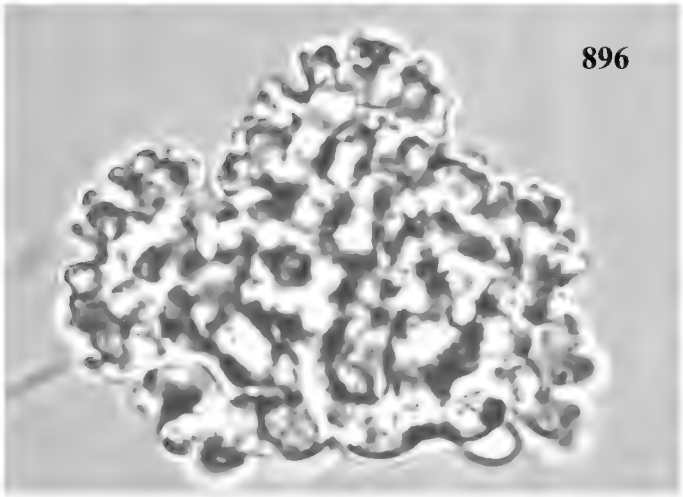
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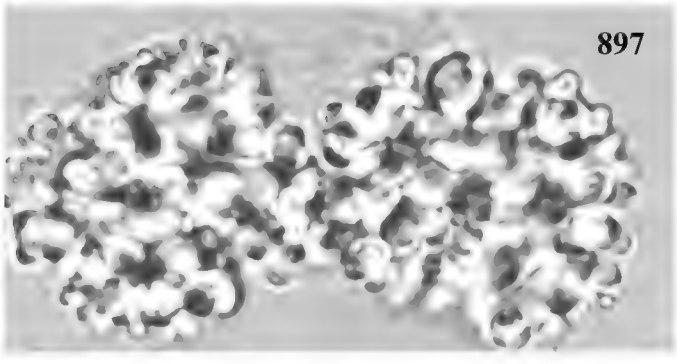

897

1248 ***Chaetonectrioides malaysiana*** T. Matsushima sp. nov.
Anamorphosis: ***Mirandina flagelliformis*** T. Matsushima anam.- sp. nov.

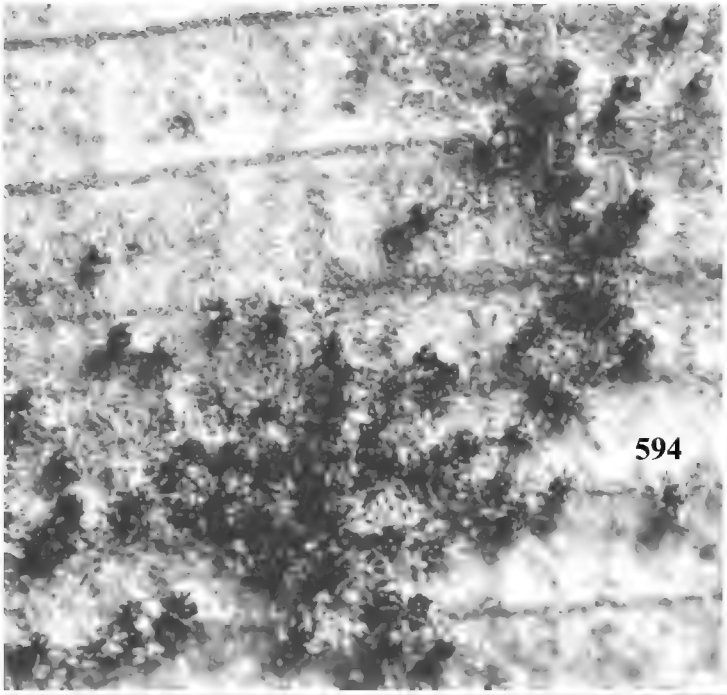
HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: b/c: cultura exsiccata, MFC-5T121.

DESCR In b/c: Colonia effusa, hyphis aeriis sparsis. Ascomata perithecia, superficialia, sine stromate, dispersa, solitaria vel 2-3 aggregata, ovata, papilla ostioli, 50-120 µm in diam., atro-fusca, parte superiore setifera; peridium membranaceum, aspectu superficiali textura epidermoidea modice brunneum; setae rigidae simplices rectae vel sinuolatae, usque ad 110 µm longae, inferne 4.0-4.5 µm latae subapice 3.0-3.5 µm latae, apice obtusae, septatae, crassitunicatae (luminibus deminuatis), laeves brunneae. Asci unitunicati, fasciculati, cylindrici, 50-65 µm longi, medio (parte crassissima) 7-8 µm lati, apice annulo, pede brevi 5-8 µm longo leviter angustato, uniseriate 8-spori. Ascosporae oblongae ad plus minusve obovatae, medio 1-septatae, non-constrictae ad septum, 9-12 x 3.5-4.5 µm, laeves, hyalinae.

Anamorphosis: *Mirandina flagelliformis* anam.- sp. nov. In CMA: Colonia modice crescens, hyphis aeriis sparsis, postea aspectu minute pulveracea a sporulatione abundanti, brunneo-alba ad pallide fusca, margine sterilis diffusa. Hyphis vegetativis ramosis, septatis, 1.0-3.5 µm latis, laevibus, hyalinis ad subhyalinis. Conidiophora mononematosa, macronematosa, dense dispersa, simplicia, interdum 1-2 ramulis lateralibus brevibus, similaria *Dactylariam fusiformem*, 8.5-62.5 µm longa, 0-8-septata, 2.0-4.0 µm lata, laevia, pallide brunnea. Conidia flagelliformia, 43-66 µm longa, (2-)5-septata, intra parte crassissima 2.0-3.0 µm lata, basi 0.8-1.5 µm lata, parte superiore flagelliformia curva attenuata 0.8-1.0 µm lata, laevia, hyalina. Primordia ascomatis in agaro formata, globosa, brunnea, haud matura.

MEM Cultures produced ascomata only by fresh (not aged) original isolates. Production of *Mirandina*-anamorphosis is good on CMA but poor on b/c-medium. ** Scheuer, Ch. 1991. Mycol. Res. **95**: 811-816. => *Taphrophila cornu-capreoli* (*Dothideales*: *Tubeufiaceae*) has *Mirandina* anamorphosis.

ICO P594: perithecia on b/c, x 40.
P595: a squashed perithecium, x 400.
P596: asci from a squashed perithecium, x 1000.
P597: *Mirandina*-anamorphosis on CMA, x 40.
P598: conidia (phase contrast), x 1000.
F866: conidiophores of *Mirandina*-anamorphosis, CMA, x 1000. (in p. 209)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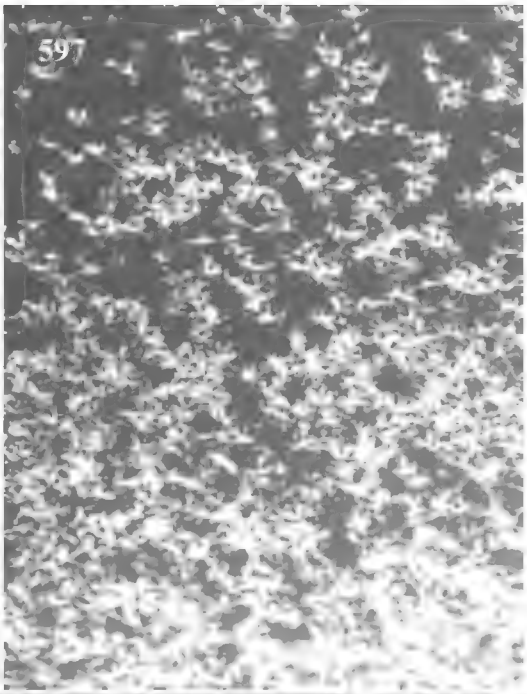
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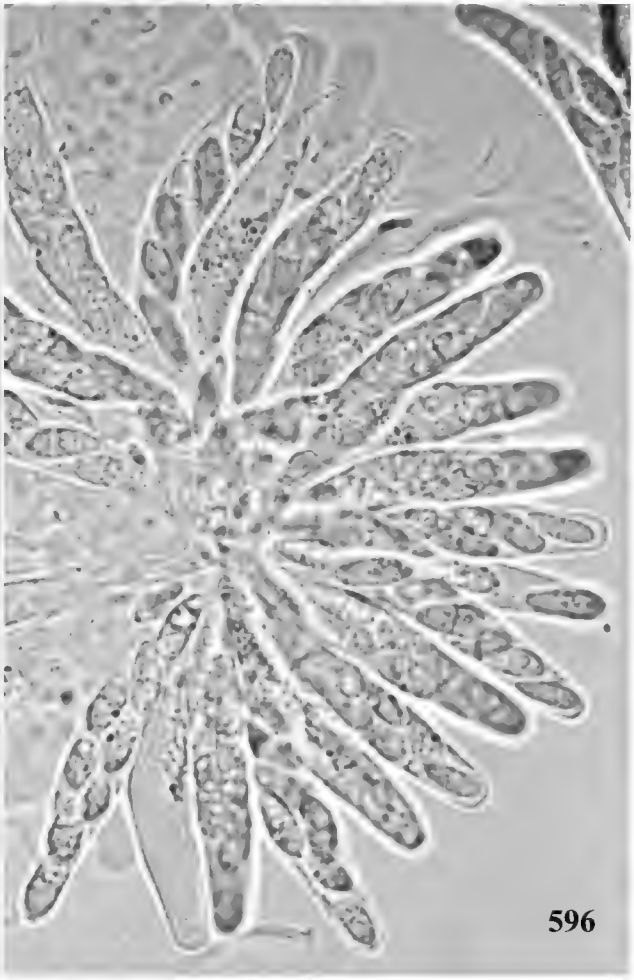
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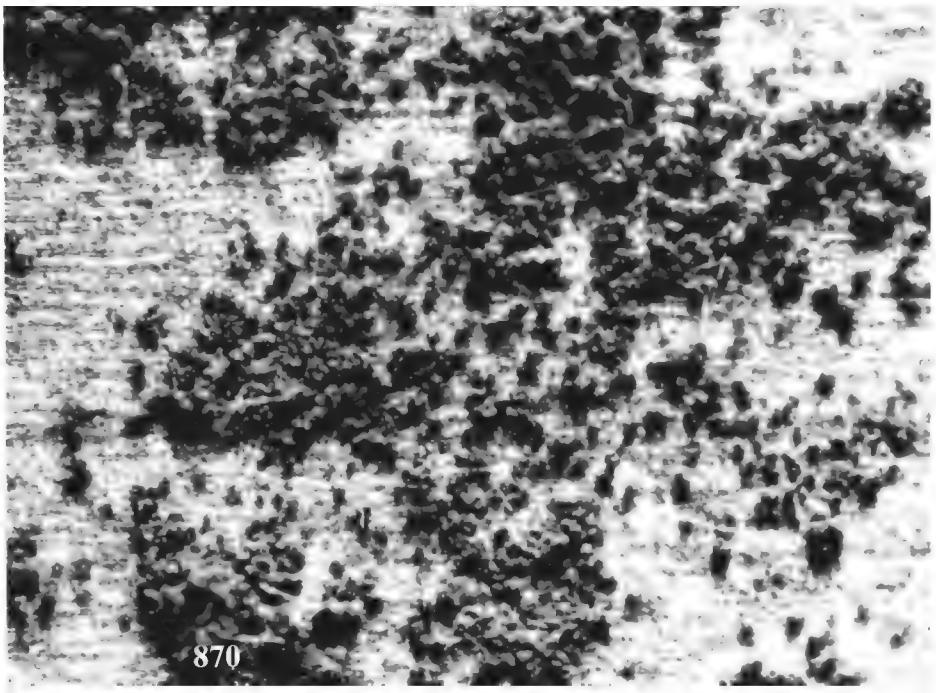
598

1249 ***Cirrenalia caffera*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: b/c cultura exsiccata, MFC-5A085.
DESCR In b/c: Colonia effusa, hyphis aeriis sparsis. Hyphae vegetativae ramosae, septatae, filiformes 1.5-4.0 µm latae, subhyalinae ad pallide brunneae; hyphae moniliformes 5-11 µm altae, laeves, pallide brunneae ad brunneae. Conidiomata similia microsporodochiorum, pro massis parvis atrofuscis dense dispersa. Conidiophora mononematosa, micronematosa, superficialia, dense aggregata intricata. Cellulale conidiogenae in hyphis repentibus incorporatae; conidia lateraliter sessiliter per denticulas, vel in ramo laterali brevo cylindrico ad obconico 2.5-7.5 µm longo 2.0-2.5 µm lato formatae. Conidia helicoidea, non-hygroscopica, sicca, 0.5-2-plo in planis duobus vel frquenter plus minusve in planis tribus arcte spiraliter circinata, diametro spirae 10-22 µm, cellula basali basi truncata 2.0-2.5 µm; filamento transverse multi-septato, leviter ad septa constricto, laevi, pallide brunneo ad brunneo; quaque cellula filamenti, 5.0-7.5 µm in diam., 3.5-7.0 µm longa. Conidia maturitatem ad cellulas conidiogenas potius persistentia; liberatio conidialis schizolytica. Chlamydosporae propiae nullae. Synanamorphosis ignota. Teleomorphosis ignota. In CMA: Coloniae tardissime crescentes, atrofuscae, sporulatione sparsa.
MEM Ellis, M. B. 1976. More Dematiaceous Hyphomycetes, p. 38-40. => *Cirrenalia* spp. ** Shearer, C. A. 1987. Mycologia **79**: 468-472. => *Helicoma chlamydosporum,* from submerged wood in Panama, has some similarity to the present new species. ** This anam.- gen. seems to be close to *Helicosporella* Arnaud in Bull. Soc. Mycol. Fr. **69**: 292-293. 1953. (nomen invalidum).
ICO P870: sporulation on b/c, x 40.
P871, P872: fragments of sporodochia-like conidiomata, x 1000.
F875: conidiogenous cells and conidia, b/c. x 1000. (in p. 212)



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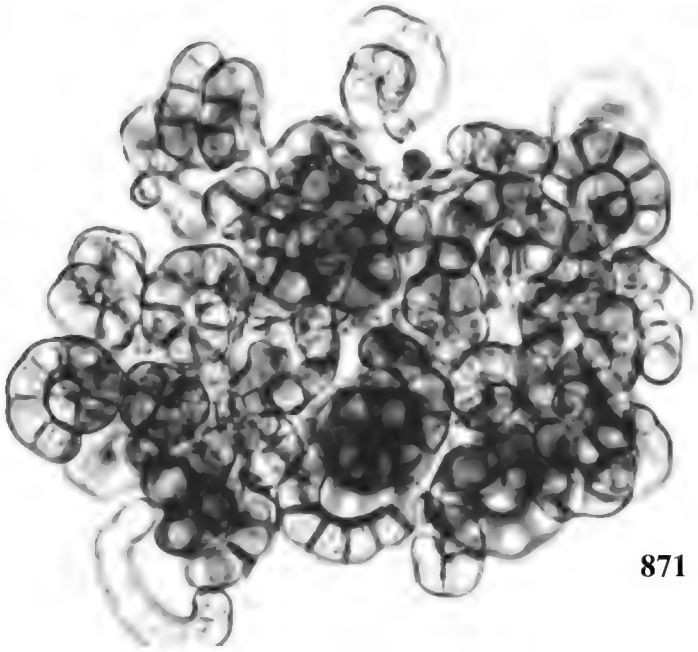

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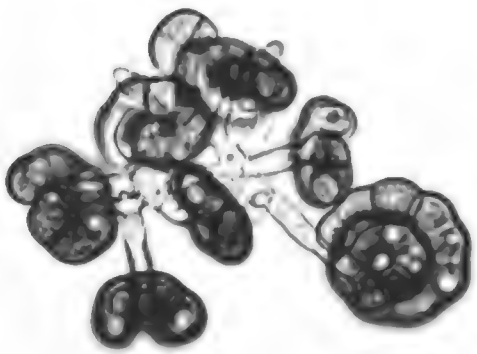
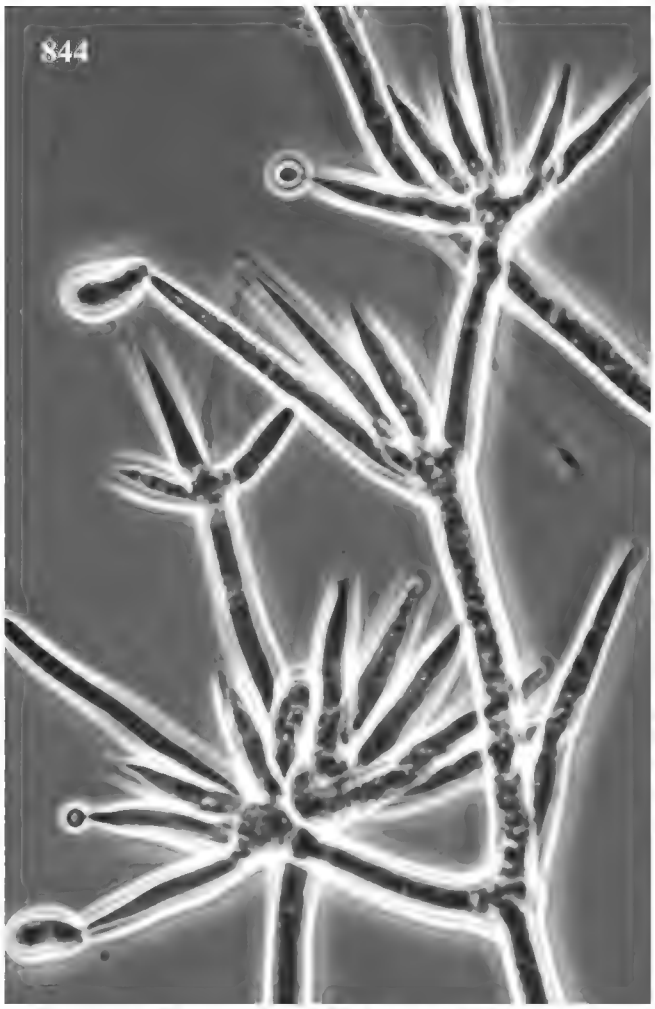


872

1250 ***Cladobotryum curvididymum*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Otomizu-keikoku, Hyogo Pref., Japan; Sept. 1995. **Typus:** CMA cultura exsiccata, MFC-5H433. **Etym.**: *curvi-didymum* = conidia two celled and curved.
DESCR In CMA: Colonia modice crescens, aspectu pulveracea a conidiatione, postea pallide roseolascens. Conidiophora mononematosa, macronematosa, erectra, simplicia, parte superiore cellulis conidiogenis et/vel ramulis cum cellulis conidiogenis in verticillis multis praedita; in quoque verticillo usque ad 10 cellulis conidiogenis; cellulae conidiogenae subulatae 15-50 µm longae, inferne 3.0-5.0 µm latae, apice obtusae 1.5-2.5 µm latae monophialidicae determinatae, laeves, hyalinae. Conidia anguste obovoidea, praecipue leviter curva, 1-septata, 12.5-25 x 6.0-7.5 µm, laevia, hyalina. Aggregationes cellularum in agaro formates; quaeque cellula globosa, crassi-tunicata, pallide luteo-brunnea laevis.
MEM The new species is similar to *Cladobotryum pinarense* Castaneda Ruiz, in Fungi Cubenses, p. 4-5. 1986.
ICO P844, P845: conidiophores and conidiogenous cells, CMA, x 1000 (phase contrast).
P851: conidia, x 1000 (phase contrast).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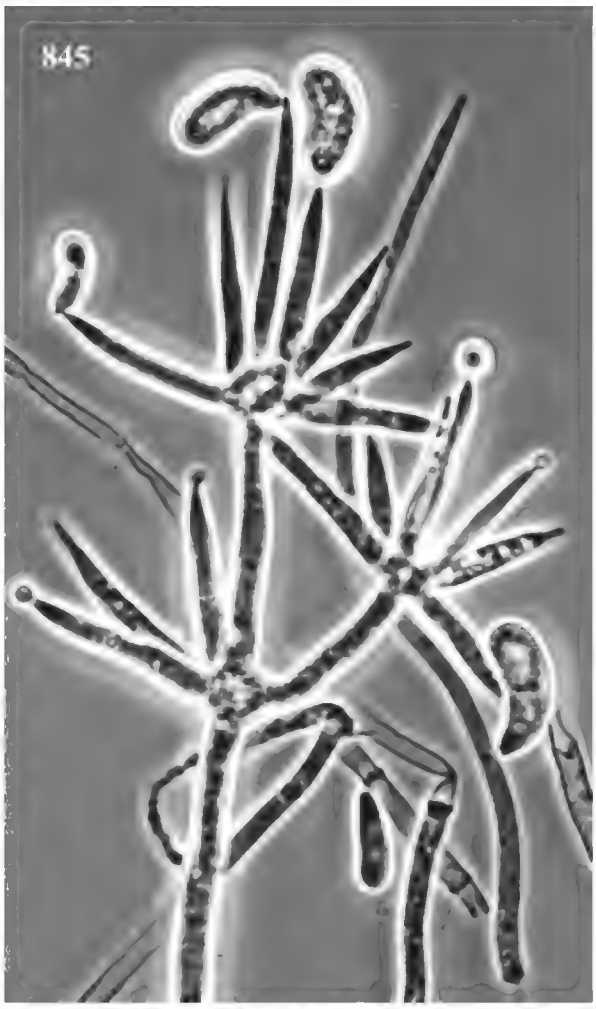
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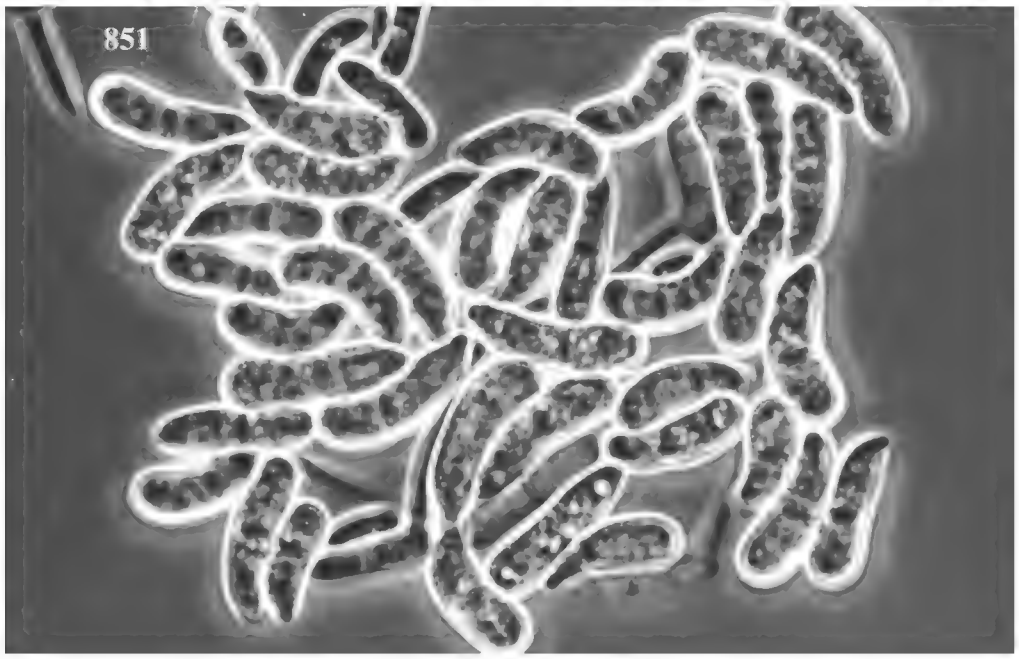
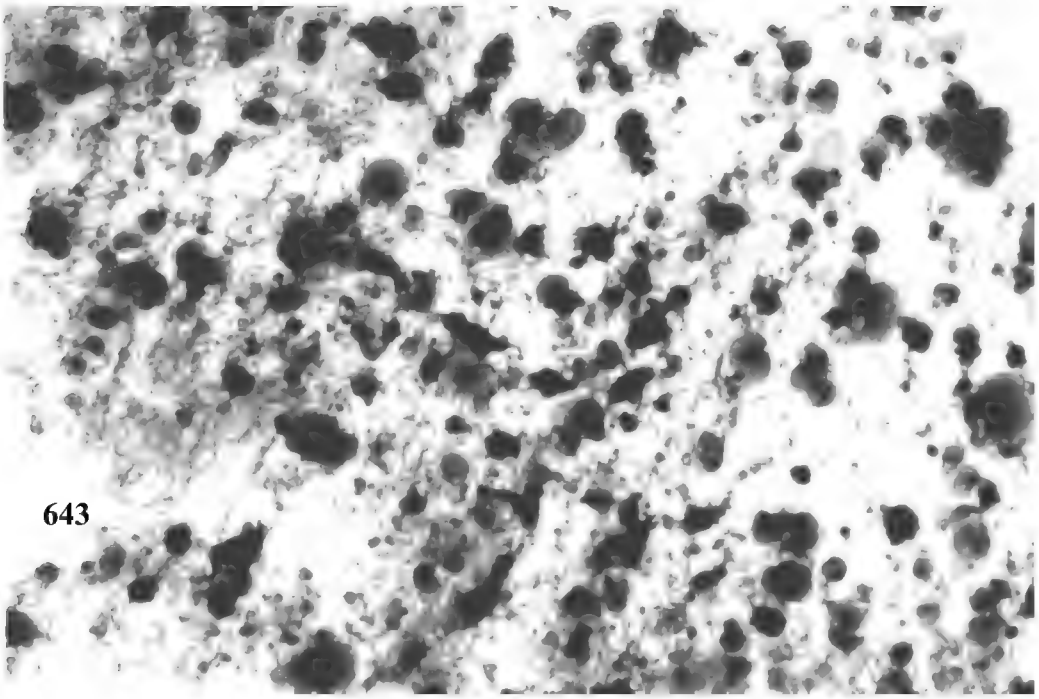

851

1251 ***Colletotrichum sinuatosetiferum*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Nabari City, Mie Pref., Japan; June 1995. **Typus**: CMA cultura exsiccata, MFC-5H248. **Etym.**: *sinuato-setifer* = bearing sinuate setae.
DESCR In CMA: Colonia effusa, subhyalina, sporodochiis punctiformibus modice fuscis dense dispersis, margine diffusa. Conidiomata sporodochia, parva, initio gangliones ex hyphis arcte intertortis composita, setifera. Setae propiae, simplices vel ramosae, sinuolatae, coninuae vel paci-septatae, 25-50 µm longae, supra basim 4-5 µm latae, sursum ad 1.5-3 µm angustatae, laeves, brunneae. Conidiophora praesentia vel absentia; ubi praesentia simplicia vel breviter ramaosa, ex cellulis stromatis modice brunneis oriunda, pallide brunnea. Cellulae conidiogenae in fasciculo parvo apice conidiophoro dispositae vel cellulis stromatis directe oriundae, plus minusve obovoideae, apice enteroblasticae-phialidecae, ore intrinsecus incrassato, 6-11 x 4.5-6 µm, laeves, subhyalinae ad pallide brunneae. Conidia sphaerica, 9-11 µm in diam., interdum late obovoidea, 10-15 x 8-12.5 µm, basi hilo minuto protrudenti, laevia, hyalina, pallidissime brunnea uda in massa. In PDA: Agaro roseascenti. Synanamorphosis ignota. Teleomorphosis ignota.
ICO P643: sporodochia on CMA, x 40.
P644: sporodochia, x 400.
P645, P646, P647: setae, x 1000.
P648: conidiogenus cells, x 1000.
P649: conidia, x 1000.
F881: fragments of sporodochia, CMA, x 1000. (in p. 213)



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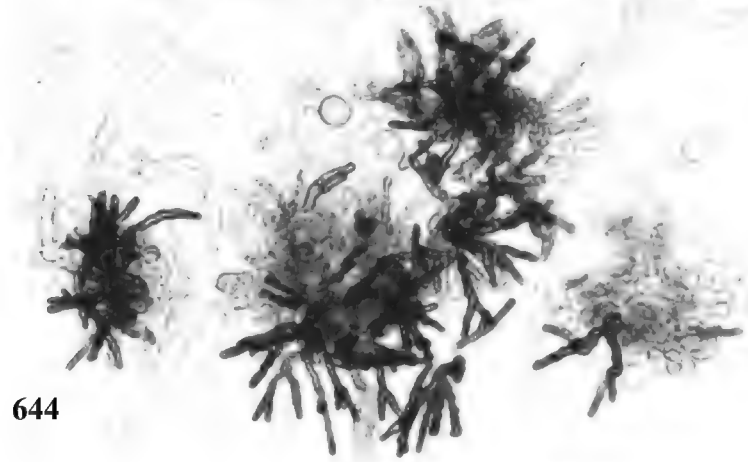

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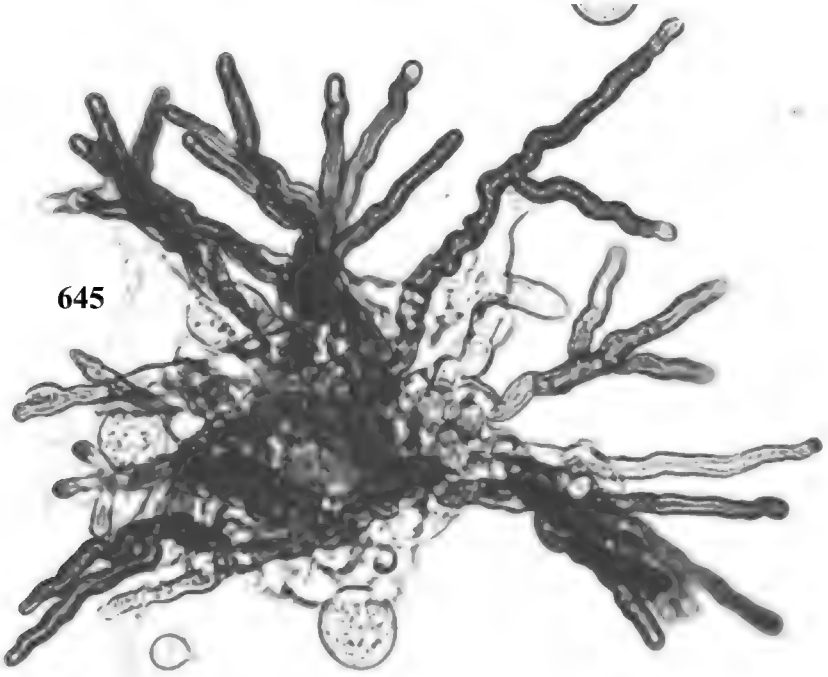

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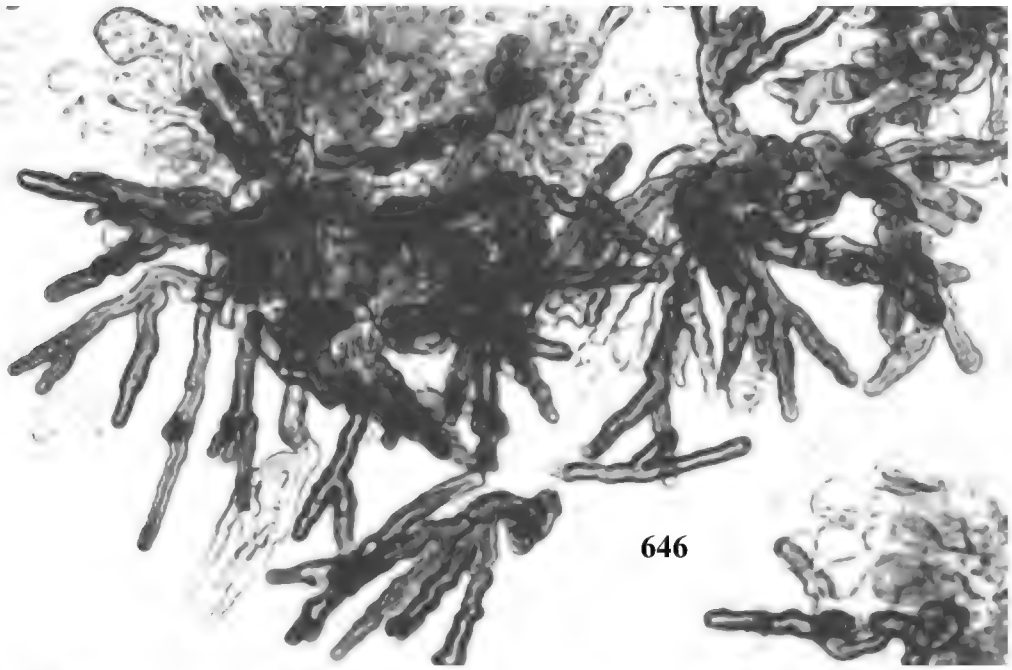

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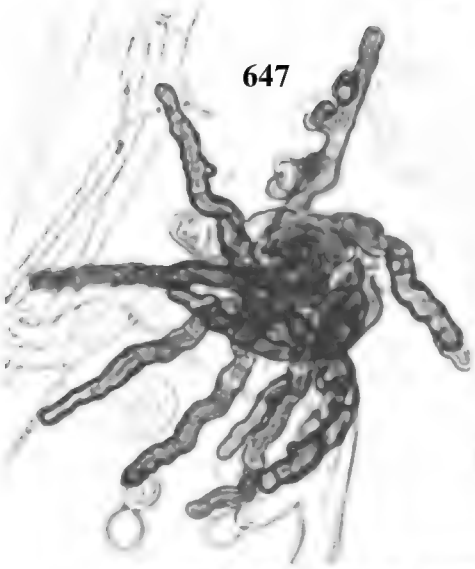

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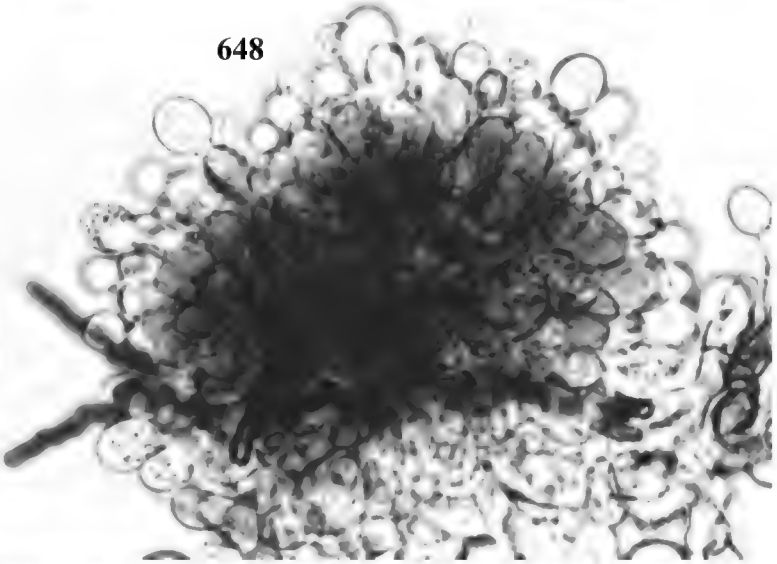

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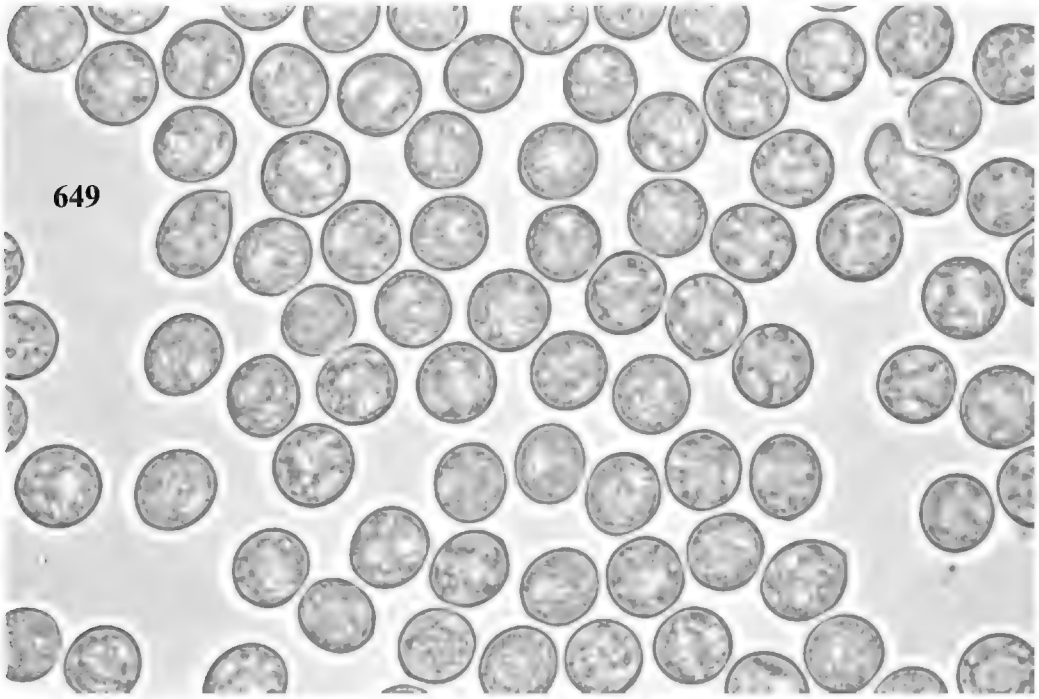

649

1252 ***Coniochaeta caffera*** T. Matsushima sp. nov.
HAB Ex solo sylvae; Knysna, South Africa; Sept. 13, 1995. **Typus**: CMA exsiccata, MFC-6K049.
DESCR Colonia effusa, peritheciis ateris dispersis. Hyphis vegetativis hyalinis ad subhyalinis, non-propiis. Perithecia solitaria vel gregaria, obpyriformia, ostiolata, 225-440 μm alta, 150-275 μm in diam., atro-brunnea, setifera; setae aequaliter sed praecipue circum ostiolum distributae, simplices, rectae, cylindricae, sursum non vel leviter angustatae, usque ad 50 μm longae, 2-3 μm latae, crassi-tunicatae, laeves, atro-fuscae, continuae vel pauci-septatae, apaice obtusae; peridium textura angulari aspectu superficiali, brunneum, frequenter parte carbonaceum. Paraphyses ascis mixtae, filiformes, septatae, hyalinae. Asci cylindrici, pede brevo angustato, uniseriate 8-spori, 115-140 μm longi, 12-15 μm lati; apice perforati emittentes sporis. Ascosporae ellipsoideae utrinque subapiculatae, rima longitudinali, 15–19 μm longae, 7.5-10 μm latae (latitudine tota), leviter complanatae (ratione ca. 10 : 8), laeves, fuscae. Anamorphosis ignota.
MEM This species is similar in ascospore size to *Poroconiochaeta punctulata* Udagawa & Furuya (in Trans. mycol. Soc. Jap. **20**: 8. 1979), but the ascospores of the latter have very finely pitted wall.
REF Hawksworth, D. L., & Yip, H. Y. 1981. Aust. J. Bot. **29**: 377-384. => with a key to 11 *Coniochaeta* species known in culture. ** Mahoney, D. P., & J. S. LaFavre. 1981. Mycologia **73**: 931-952. => with a summary of ascospore morphology of 32 *Coniochaeta* spp. ** Checa, J., J. M. Barrasa, G. Moreno, F. Fort, & J. Guarro. 1988. Cryptog., Mycol. **9**: 1-34. => with a key to 15 spp. known in Spain.
ICO P575: asci and ascospores, CMA, x 1000.
P576, P577: the same, focused on the fissure of ascospores.

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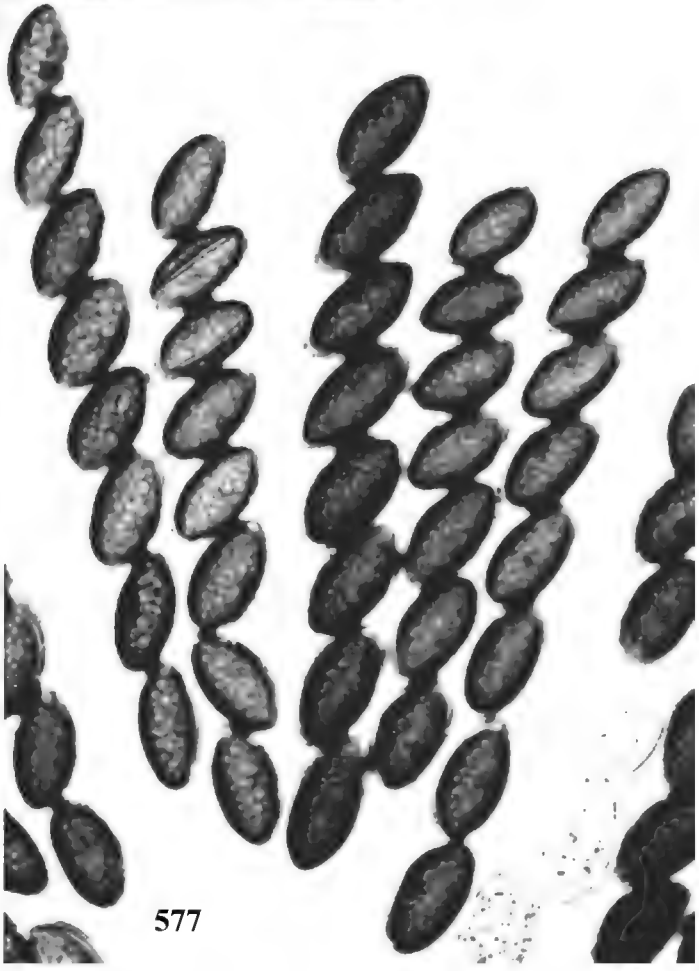

577

1253 ***Coniochaeta magniquadrispora*** T. Matsushima sp. nov.
HAB Ex solo; Johannesburg Botanical Garden, South Africa; Sept. 22, 1995. **Typus**: CMA cultura exsiccata, MFC-6K051. **Etym.**: *magni-quadrispora* = big four spores in asci.
DESCR A congeneribus ascis 4-sporis, in forma atque magnitudine ascosporarum diversa. In CMA: Colonia tenuiter effusa, fere immersa, brunneo-albida. Hyphis vegetativis hyalinis, no propiis. Perithecia solitaria vel aggregata, superficialia vel immersa, ovata, 100-215 µm alta, 60-150 µm in diam., setifera; peridium textura angulari aspectu superficiali, brunneum, frequenter parte carbonaceum; setae ubique dispersae, praesertim circum collum, simplices, brunneae, rectae, ridigae, 20-50 µm longae, 2.0-2.5 µm latae, apice obstusae, laeves. Paraphyses ascis mixtae, filiformes, hyalinae, septatae. Asci cylindrici, pede brevissimo, 65-75 µm longi, 10-12.5 µm lati, oblique uniseriate 4-spori, interdum 1-3- spori. Ascosporae late fusiformes, rima longitudinali, non complanatae, 17-20 x 9-11 µm ex ascis 4-sporis, 19-25 x 10-13 µm ex ascis 1-3-sporis, laeves, fuscae. Anamorphosis ignota.
REF T. Matsushima (1971), Microfungi of the Solomon Islands and Papua - New Guinea, p. 72. => *Coniochaeta tetraspora* Cain.
ICO P578: ascospores focused on the fissure, CMA, x 1000.
P579, P580: asci, x 1000.
P581: a squashed perithecium, x 400.

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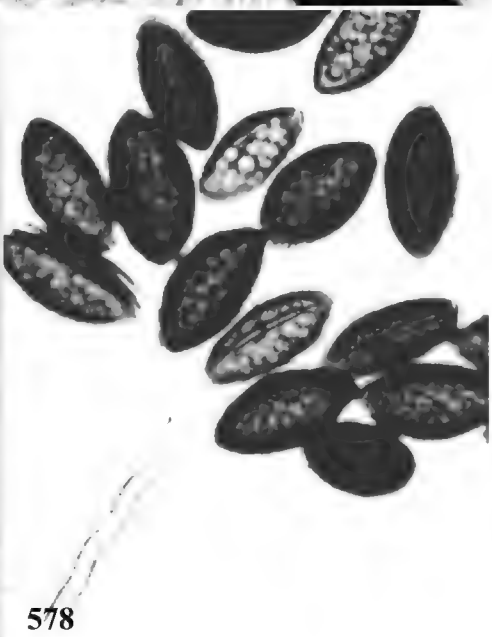


578

1254 ***Conioscypha bambusicola*** T. Matsushima, in Icones Microfungorum A Matsushima Lectorum (1975), p. 38.

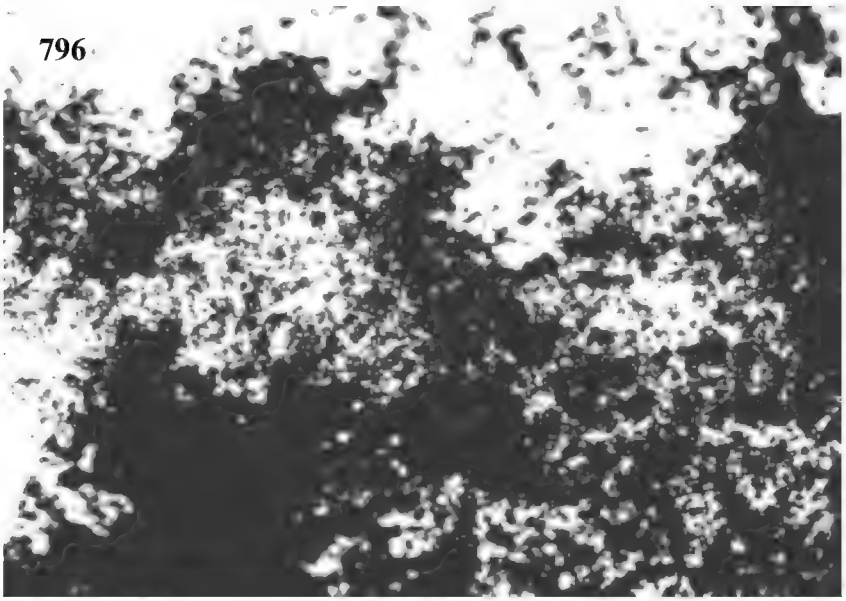
HAB On a decaying twig of a baroad-leaved tree; Botanical Garden, University of Malaya, Kuala Lumpur, Malaysia; June 10, 1995. MFC-5T029. ** On a dead Oak leaf in stream; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A042. ** On dead pine needles in stream; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A073.

DESCR MFC-5T029 on CMA: Colony growing slowly, black and wet by very good conidiation, with narrow white sterile margin. Vegetative hyphae branched, septate, 1.0-2.5 µm wide, smooth, hyaline. Conidiophores lacking. Conidiogenous cells on repent vegetative hyphae intercalarly incorporated, with 1(-2) lateral obconical protrusion of 2.5-7 µm long, 1-2 µm wide at the base and 2.5-4 µm wide at the apex, surrounded by multi-layered collar resulted by percurrent proliferations. Conidia mitriform, (12-)13-18 (-20) µm long, (5-)6-7.5 µm wide, with apiculate apex and with truncate dark brown 2.5-3.5 µm wide base, smooth, brownish gray. ** MFC-5A042 on CMA: Conidia 12-22.5 x 6-9 µm, apiculate at the apex, truncate 2.5-4 µm wide at the base, inaequilateral or slightly curved, smooth, brownish gray. ** MFC-5A-073 on CMA: Conidia 13-20 x 7-10 µm.

MEM Fide original description (loc. cit. supra), conidia 10-16 x 6-10 µm. The species is considered to have a wide range of conidial dimensions.

ICO P794: conidia of MFC-5T029, CMA, x 1000.
P795: conidia of MFC-5A073, CMA, x 1000.
P796: colony of MFC-5T029 on CMA, x 40.
P797, P798: conidiogenous cells of 5A073, x 2000.

796



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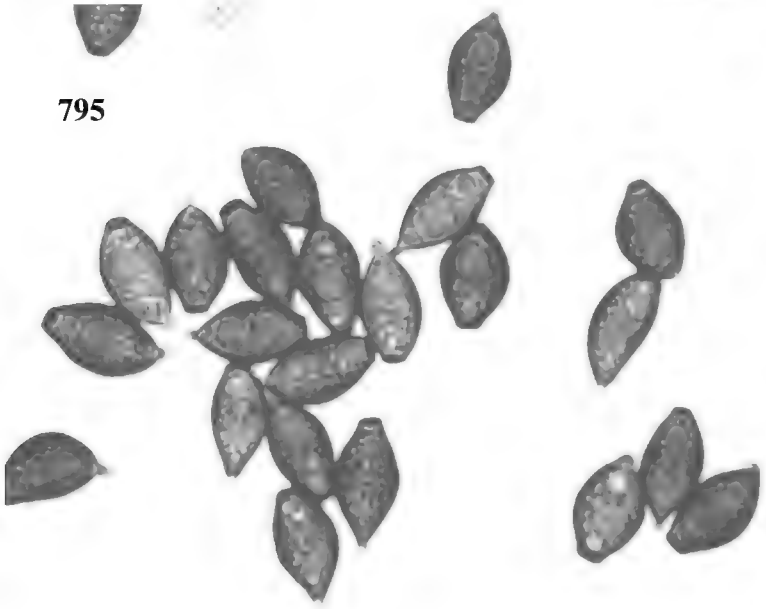

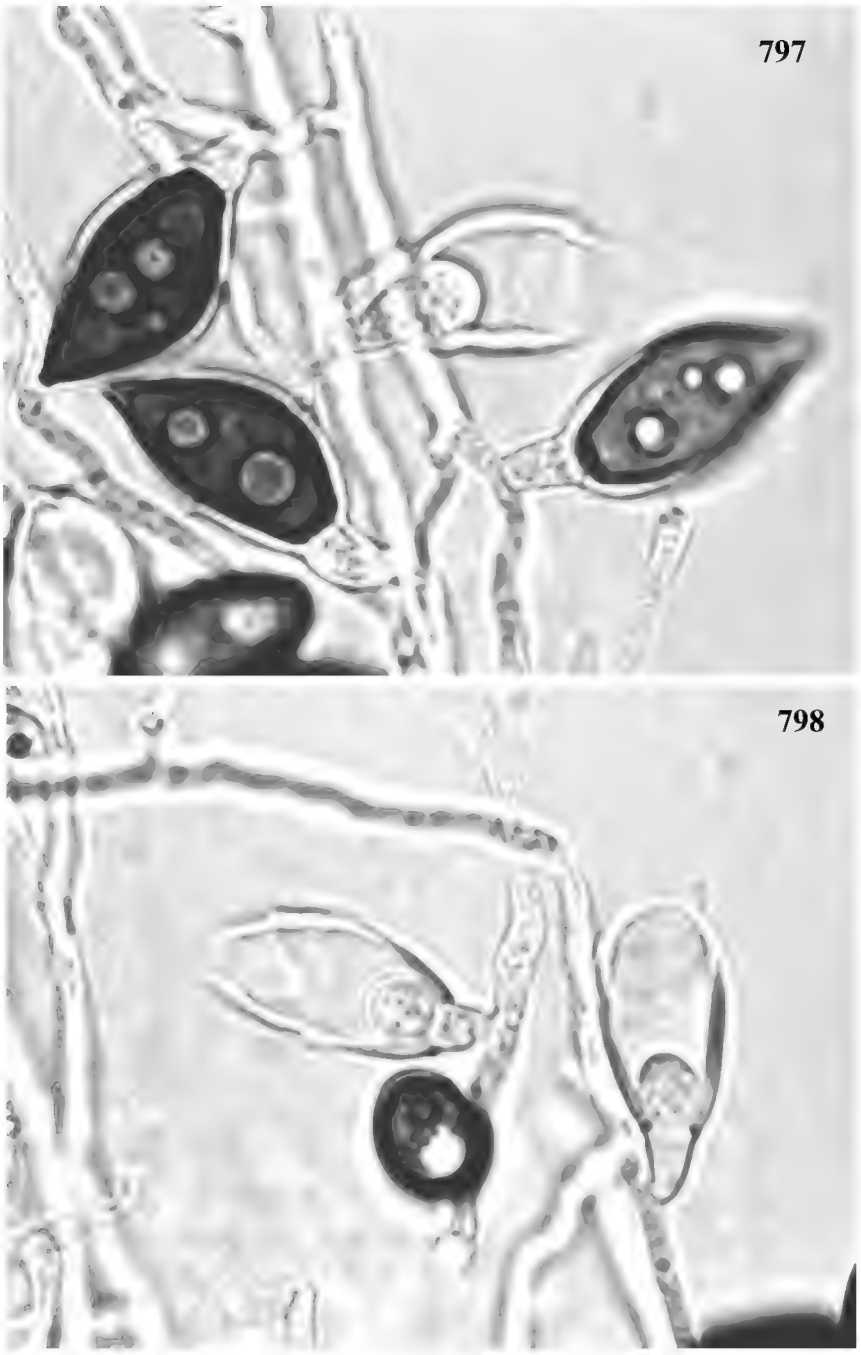
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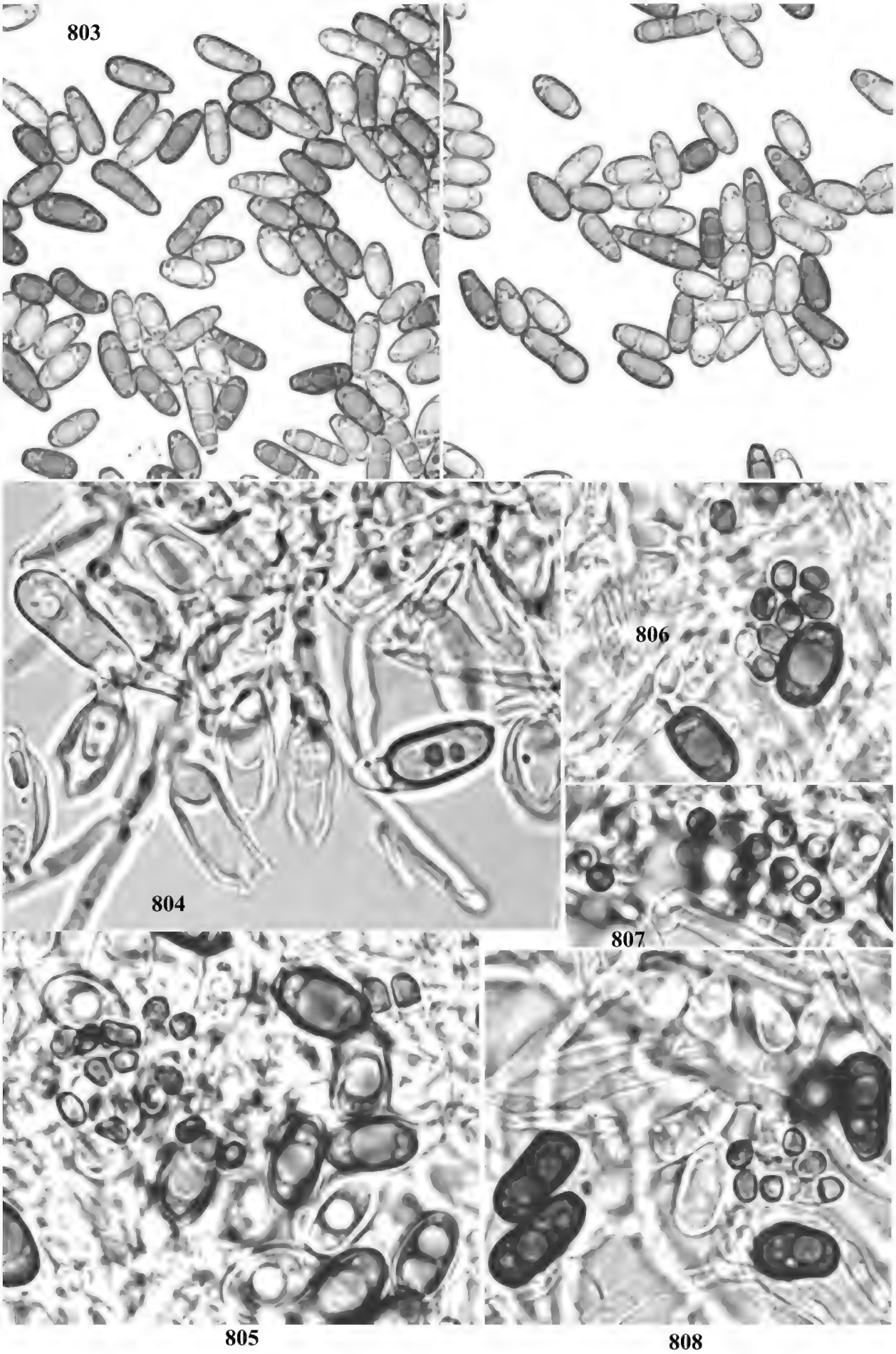
1255 ***Conioscypha dimorpha*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: CMA cultura exsiccata, MFC-5A084. **Etym.**: *dimorphus* = having two forms, i. e. having macro- and micro-conidial forms.
DESCR In CMA: Colonia tarde crescens, hyphis aeriis nullis, regione centrali fusca a sporulatione, margine cremea sterili restricta. Hyphae vegetativae ramosae, septatae, 1.0-2.5 µm latae, laeves, hyalinae. Conidiophora deficientia. Cellulae conidiogenae in hyphis vegetativis repentibus incorporatae, lateraliter protrusione obconica 2.5-5.0 µm longa basi 1.5-2.0 µm lata apice 2.5-3.5 µm lata, circumcinctae collo oblongo hyalino multi-strato. Conidia oblonga ad cylindrica, apice rotundata basi truncata, 8-18 µm, plerumque 10-14 µm longa, 4-6.5, plerumque 4.5-5.5 µm lata, laevia, modice olivacea ad modice brunnea. Forma microconidii praesens, inconspicua. Cellulae conidiogenae proportionaliter parviores quam eadem formae macroconidialis, praecipue sporadice aggregatae. Conidia subglobosa ad oblonga, 2.0-3.0 µm longa, 2.0-2.5 µm lata, apice rotundata, basi truncata, laevia, pallide brunnea.
In b/c: Vix crescens.
MEM This new species has some similarity to *Cylicogone regeneans* Van Emden & Veenbaas-Rijk and *Conioscypha fabiformis* T. Matsushima.
ICO P803: conidia, on CMA, x 1000.
P804: conidiogenous cells, on CMA, x 2000.
P805, P806, P807, P808: microconidia, on CMA, x 2000.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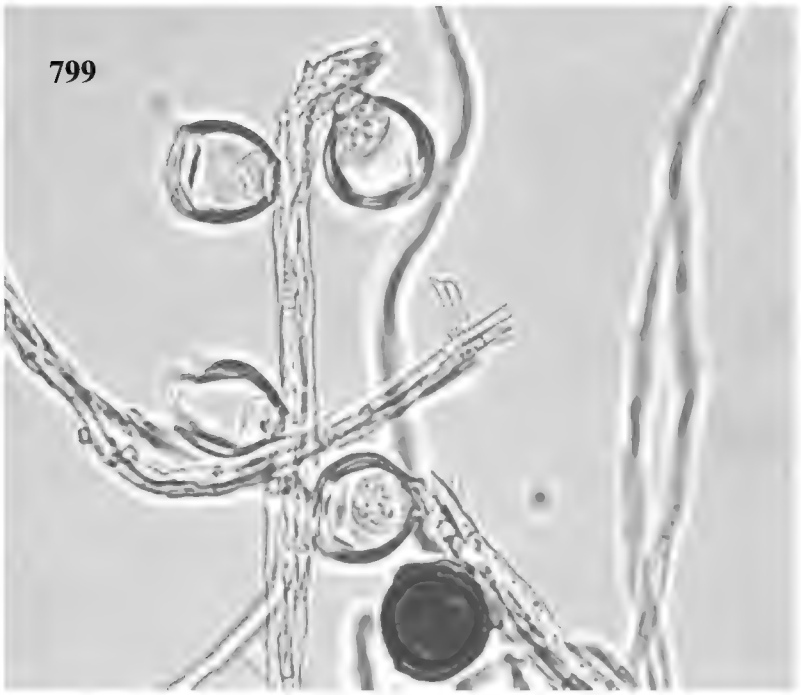
1256 ***Conioscypha lignicola*** Hoehnel, Ann. Mycol. **2**: 58-59. 1904.
HAB On a decaying borad-leaved tree leaf; Hamana-ko, Shizuoka Pref., Japan; Feb. 1995. MFC-6H095.
DESCR On CMA: Conidia obovate or sometimes subglobose, 11-22 x 10-17 μm, truncate at the base 3.0-5.0 μm wide, thick-walled (reduced lumina) 1.0-2.5 μm wide, brown, smooth but dark dots deposited at the periphery; at the base with a central pore of 0.5-0.7 μm in diam., surrounded by a dark brown ring of 2.0-3.0 μm diam.
REF Shearer, C. A. 1973. Mycologia **65**: 128-136. ** Yokoyama, T. & K. Tubaki. 1973. Bull. Natn. Sci. Mus. Tokyo **16**: 655-660 & 5 pls. p. 656. ** Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 38. ** Mats. Myc. Mem. **7**, no. 820. 1993.
ICO P799: conidiogenous cells, on CMA, x 1000.
P800, P801, P802: conidia, x 1000.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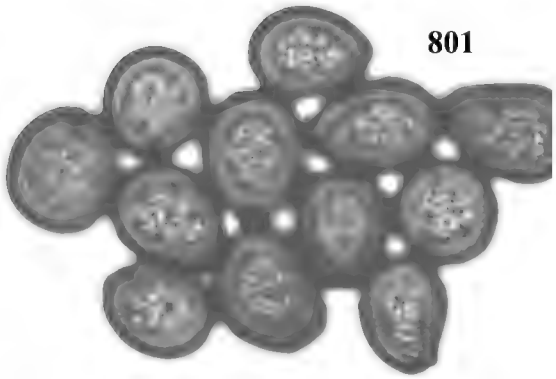
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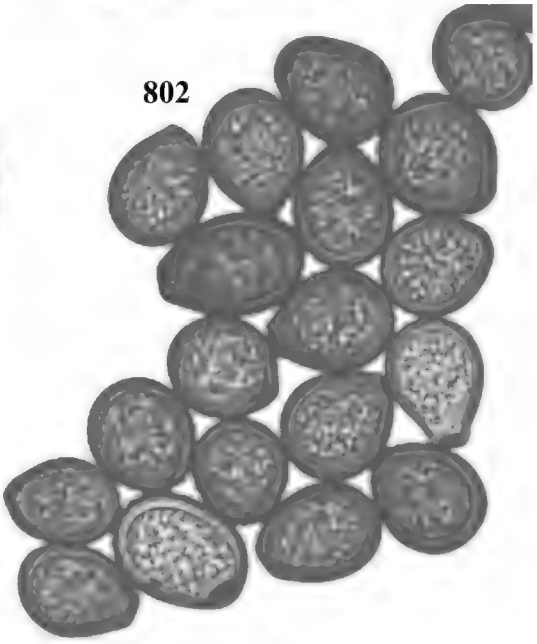
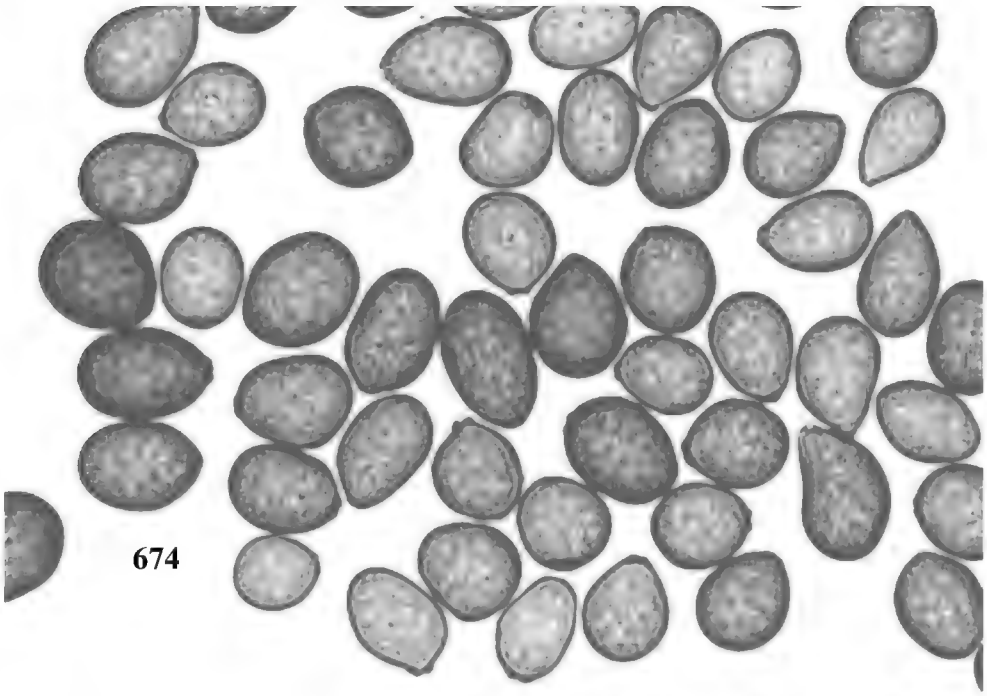

802

1257 ***Coniothyrium dactyloides*** T. Matsushima anam.- sp. nov.
HAB In mortuo ramunculo arboris latifoliae; Takarazuka City, Hyogo Pref., Japan; Feb. 1996. **Typus**: b/c cultura exsiccata, MFC-6H120. **Etym.**: *dactyloides* = finger-print like patteran on the conidial surface.
DESCR In b/c: Colonia effusa, sine hyphis aeriis. Pycnidia dispersa, solitaria vel gregaria, immersa, subglobosa ad late obata, basi plus minusve complanata, 75-160 µm in diam., atrofusca; peridium membranaceum tenue (conidia visibilia per peridium) fragile, pariete exteriore (1-2 stratis) ex cellulis angularibus complanatis pallidissime brunneis compositum, pariete interiore tenui pseudoparenchymatosum hyalinum. Pycnidia primo clausa, postea erumpentia urceolata, postremo cupulata. Conidophora deficientia. Cellulae conidiogenae sunt cellulae peridii intimae, ampulliformes ad doliiformes, 6-8 x 5.5-6.5 µm, laeves, hyalinae, enteroblasticae-phialidicae, producentes conidiis per pedicellos minutos tubiformes 2.5-4 µm longos 1-2 µm latos, collupsos ad liberationem conidialem. Conidia obovata, 12-20 x 9-15 µm, basi 2.0-3.0 µm lata ad centrum annulo atro-fusco, in pagina ordinatione dactyloide, brunnea, nigera mucosa in massa. Teleomorphosis ignota.

In CMA: Colonia tenuiter effusa, fere incolorata, sine hyphis aeriis, pycnidiis dense dispersis. Pycnidia immersa vel semi-immersa, globosa, 90-225 µm in diam. Hyphae vegetativae incoloratae.
ICO P674: conidia, x 1000.
P675: conidia, focused on the surface, x 1000.
P676: pycnidia on PDA, x 40.
P677: pycnidia on b/c, x 40.
P678, P679: pycnidia, gently squashed, x 400.



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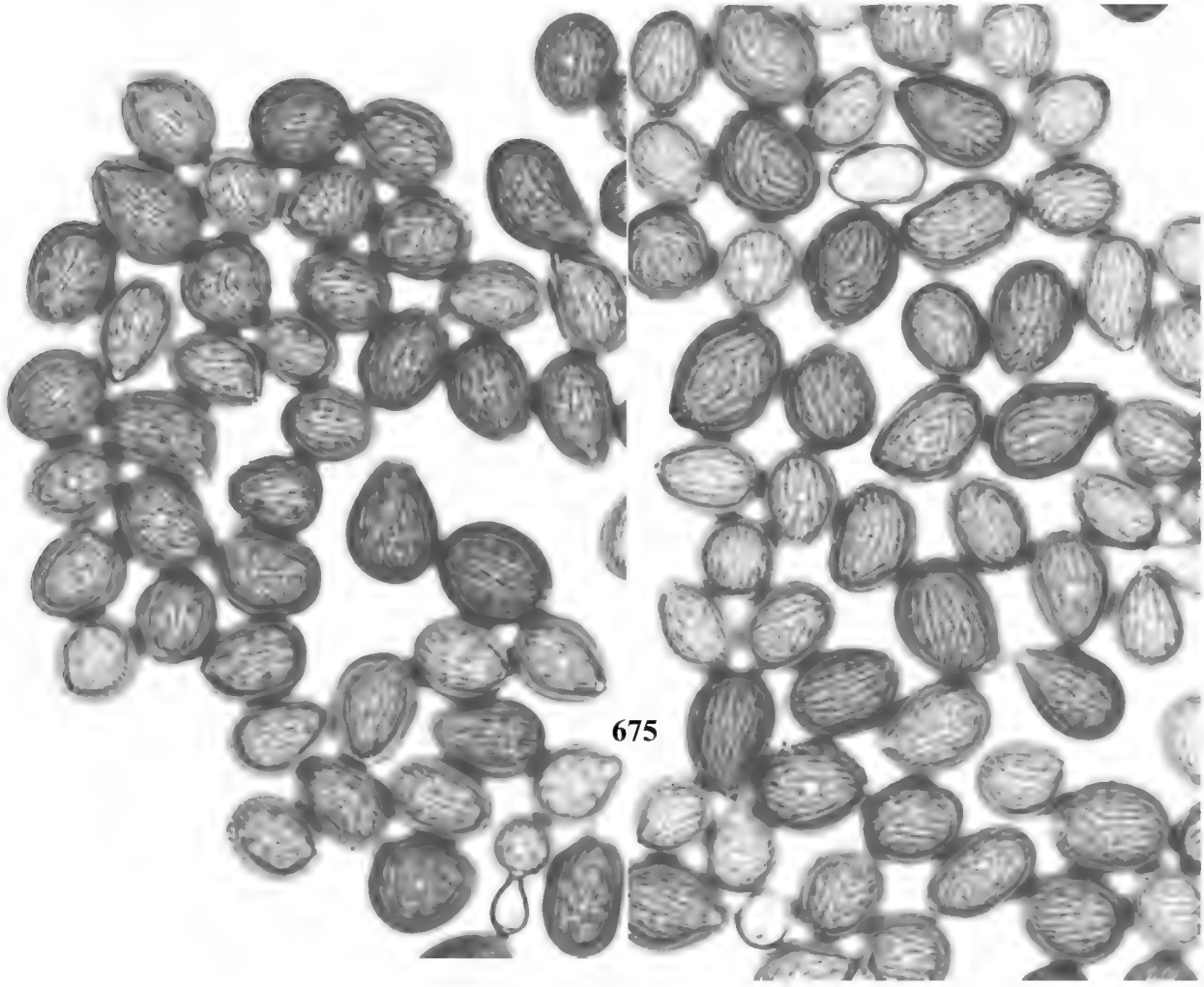

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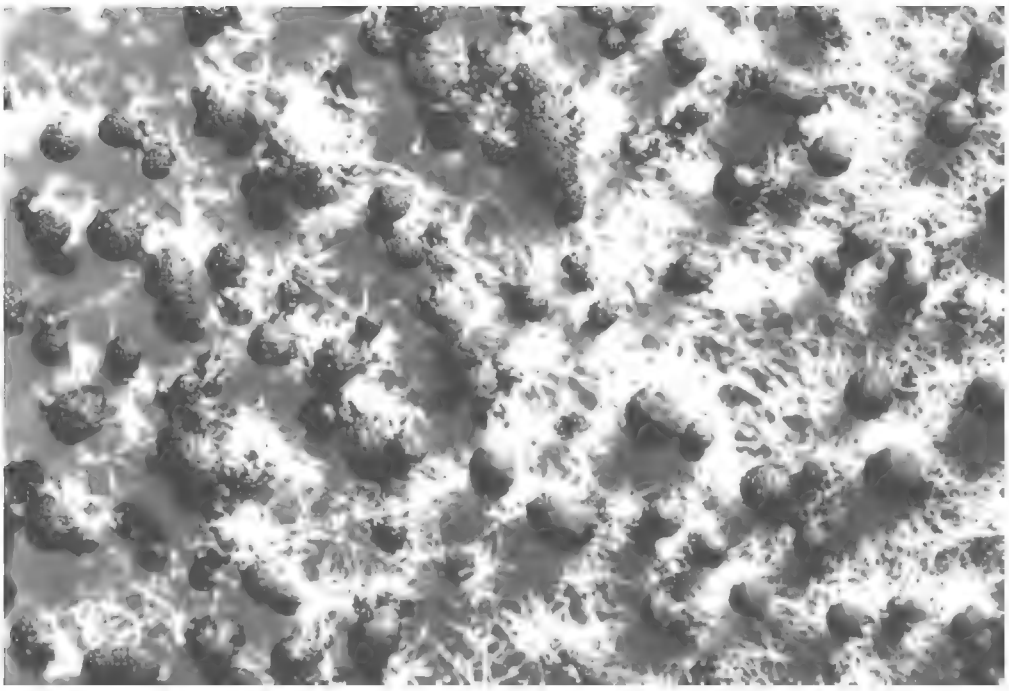

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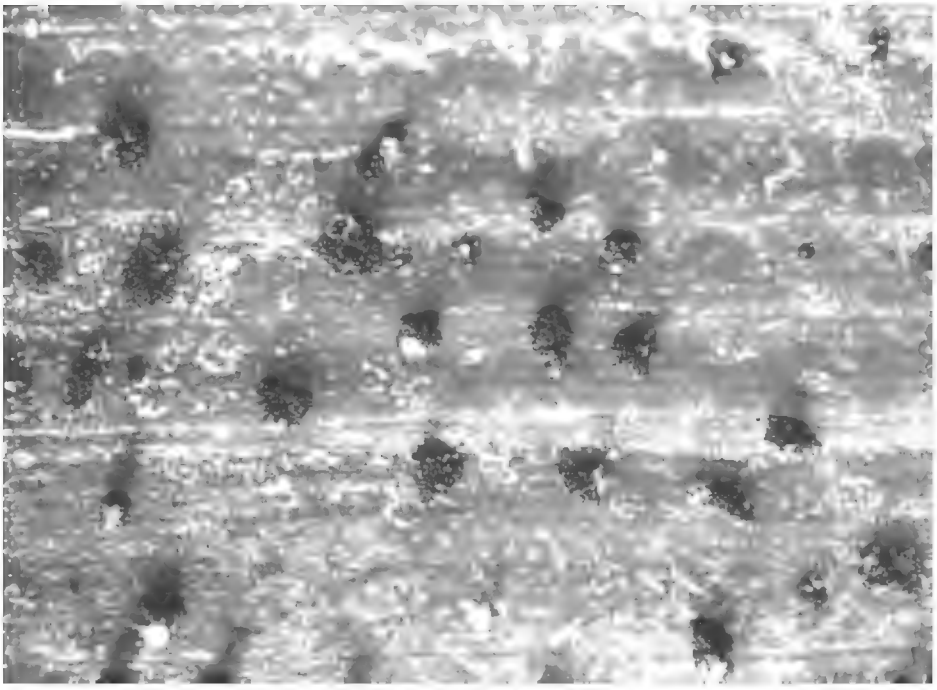

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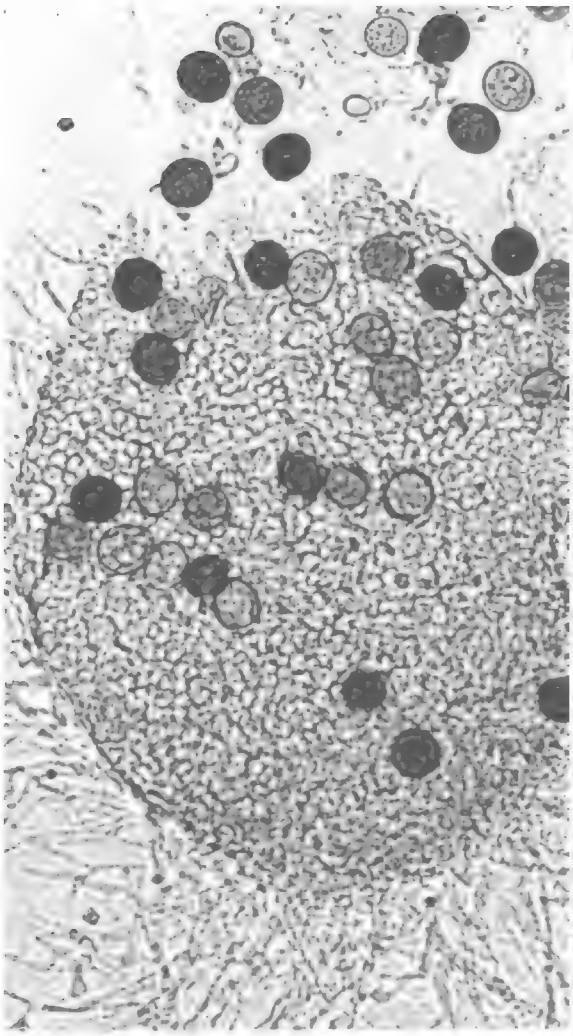

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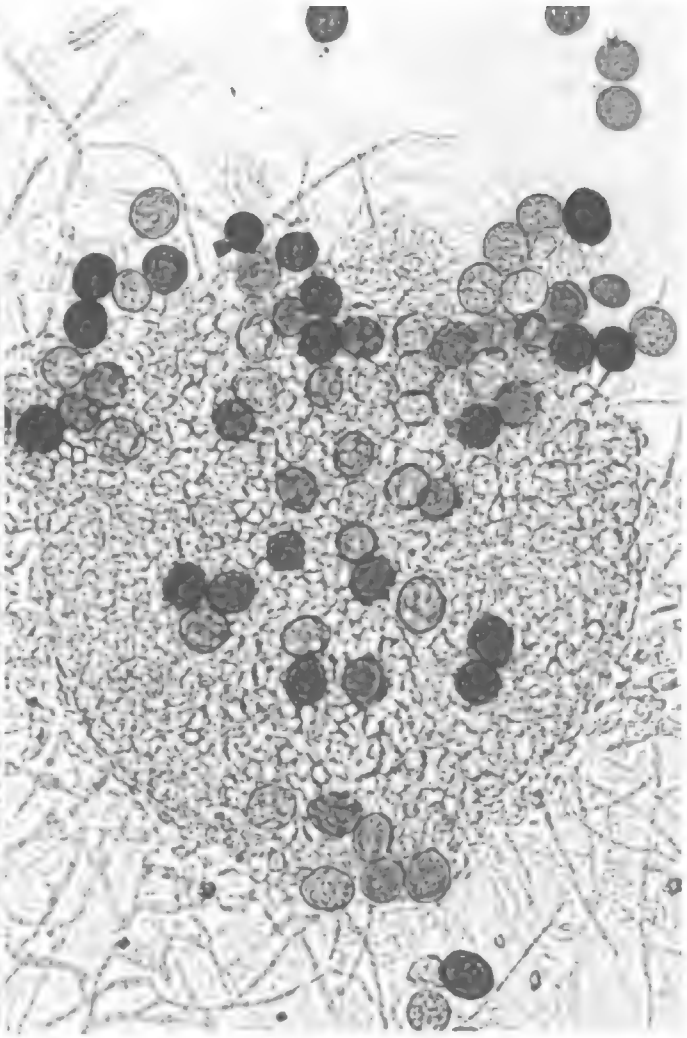


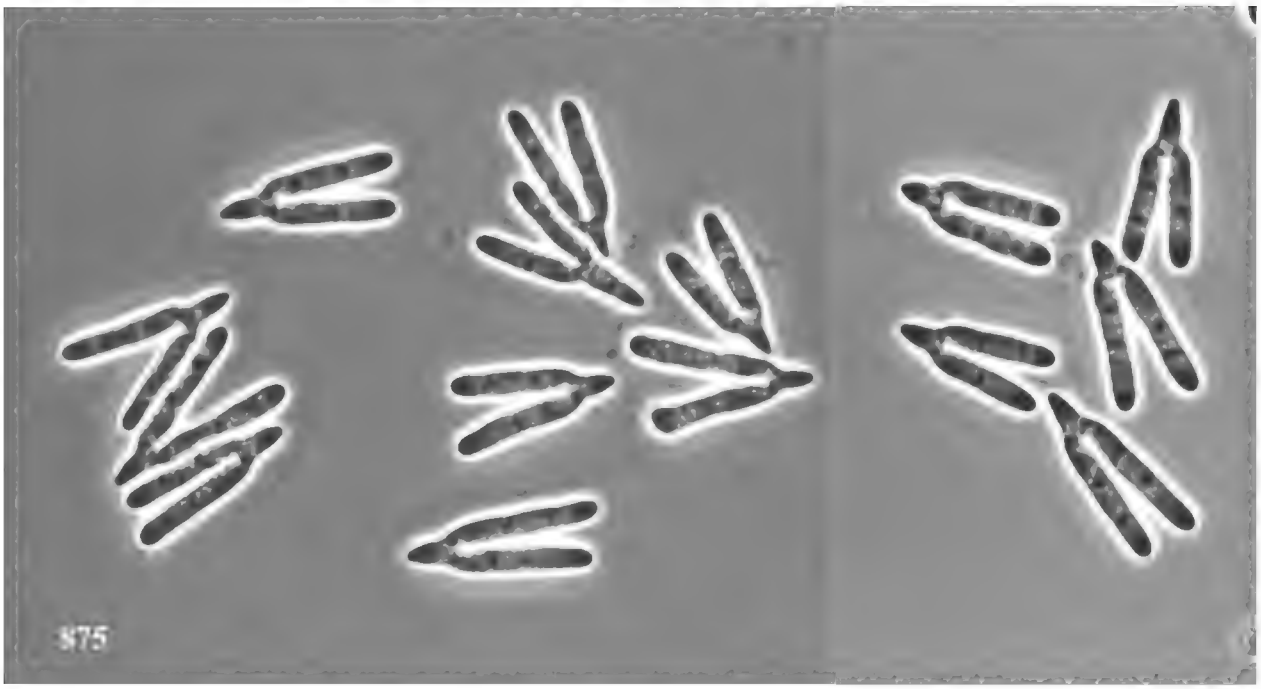
679

1258 ***Dactylaria obtriangularia*** T. Matsushima, in Icones Microfungorum A Matsushima Lectorum (1975), p. 51.
HAB On a rotten twig in stream; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A195.
DESCR On CMA: Conidia 24-35(-42.5) µm long, 2.5-3.0 µm wide at the tip, 1(-3)-septate.
REF Mats. Myc. Mem. **1**, no. 76. 1980. ** Mats. Myc. Mem. **7**, no. 838. 1993.

1259 ***Dendryphiella eucalypti*** T. Matsushima, 1983. Mats. Myc. Mem. **3**, no. 339.
HAB On a dead twig in stream; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A071.

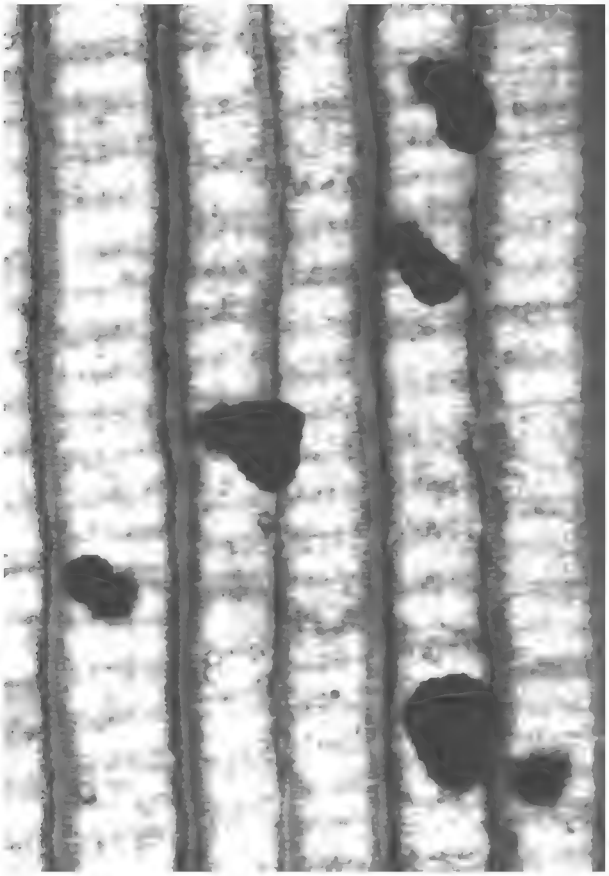
1260 ***Dicranidion tenue*** Matsushima, Mats. Myc. Mem. **7**, no. 1073, 1993.
HAB In folio putrescenti *Podocarpi* sp.; Kirstenbosch National Botanical Garden, South Africa; Sept. 11, 1995. MFC-5A112.
DESCR On CMA: Colonia modice crescens, fere immersa roseola, sporulatione aequaliter dispera. Hyphae vegetativae ramosae, septatae, laeves, 1.0-3.5 µm latae, hyalinae, non porpiae. Conidia ex cellla basali et ramis duobus constantia, longitudine tota 18-30 µm; cellula basali obconica continua 4.5-7.5 µm longa, apice ramis duobus ferens; ramis duobus V-formiter vel parallele dispositis, quoque ramus cylindricus ad interdum leviter sursum angustatus, apice rotundatus, (9-)12-19(-22) µm longus, 1-3-septatus, 3.0-4.0(-4.5) µm latus.
ICO P875: conidia, x 1000 (phase contrast).
F880: conidiogenous cells, CMA, x 1000. (in p. 212)

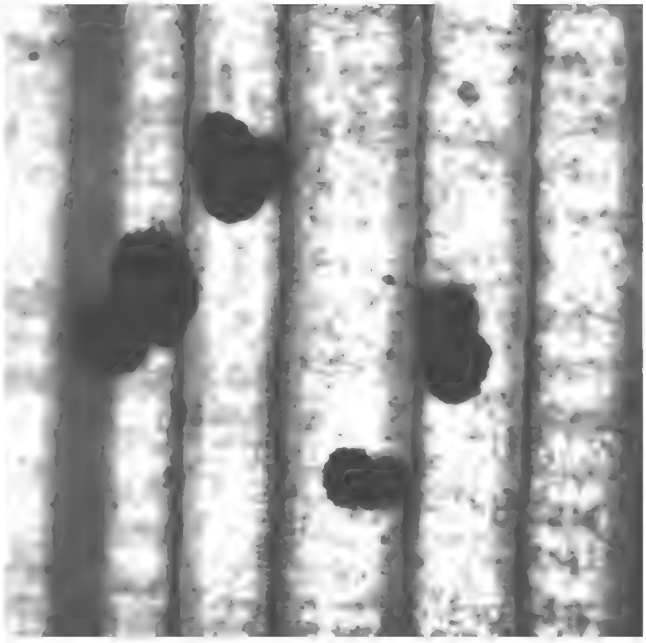
1261 ***Dictyochaeta simplex*** (Hughes & Kendrick) Holubova- Jechova, Folia geobot. phytotax. **19**: 434. 1984.
HAB In ramunculo mortuo in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A064.
DESCR On b/c: Colony spreading, whitish, with minutely powdery appearance due to abundant sporulation. Conidiophores mononematous, macronematous, arising from radially lobed basal cells, erect, simple, septate, smooth, frequently sympodially or percurrently proliferating, with clear funnel-shaped cups, light brown, paler upward. Conidia continuous, lunate, lightly curved or almost straight but unequal-sided, 16-20 x 2.5-3.2 µm, smooth, hyaline, both terminally with a setula of 5-7.5 µm long, fasciculated, whitish in mass.


875

1262 ***Diplodia caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo sicco fruticis spinosi; prope Olifantshoek (on the road side of National Route 14), South Africa; Sept. 9, 1995. **Typus**: b/c cultura exsiccata, MFC-5A227.
DESCR In b/c: Colonia effusa, immersa, sine hyphis aeriis. Pycnidia dispersa, solitaria vel 2-3 aggregata, subglobosa ad late obpyriformia, 120-250 µm in diam., ostiolata, immersa praeter apicem, maturitatem dehiscentia; peridium membranaceum, pariete exteriore ex cellulis angularibus complanatis pallide brunneis compositum, frequenter in parte carbonaceum; pariete interiore ex cellulis subhyalinis pseudoparenchymatosis compositum. Conidiophora deficientia. Cellulae conidiogenae sunt cellulae peridii intimae, ampulliformes ad doliiformes, 5-8 x 4.5-7 µm, ore 2.0-2.5 µm lato, enteroblasticae-phialidicae. Conidia obloga, (0-)1-septata, 7.0-10 x 4.5-5.5 µm, basi cicatrice non visibili, laevia, brunnea, in massa mucosa atera exsudantia.

In CMA: Colonia modice crescens, regione centrali, i. e., circum inoculum (ex PDA) fusca, margine effusa subhyalina. Pycnidia dispersa, immersa, globosa ad late obpyriformia, 150-300 µm alta, 100-250 µm in diam., fere nuda.
MEM Taxonomy of pycnidial fungi with phaeodidymous conidia is still in a state of confusion. The present fungus is placed tentatively in *Diplodia* sensu veto. ** In cultures inoculated with the original but aged (conserved for 6 months or more since isolation from the host), pycnidia became smaller in size and the conidia became mostly continuous.
ICO P707: pycnidia on b/c, x 40.
P708: young pycnidium, x 400.
P709: mature pycnidium in section, x 400.
P710: conidia, x 1000.





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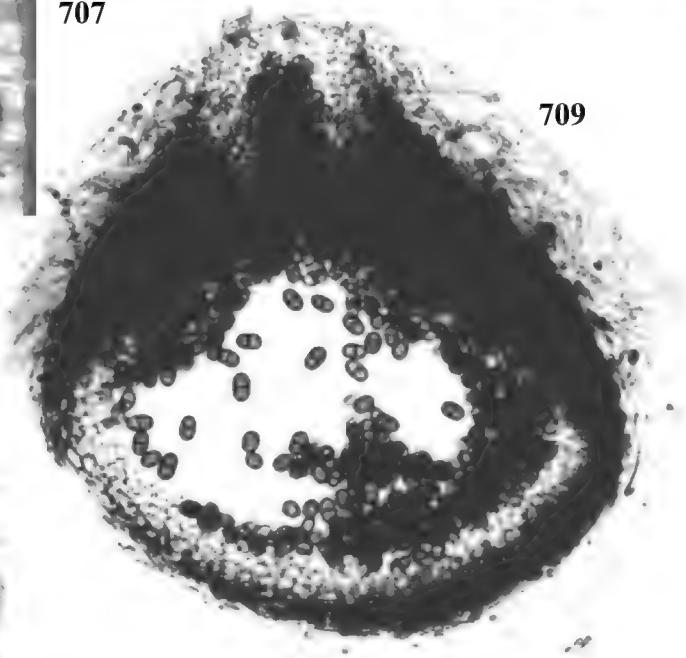
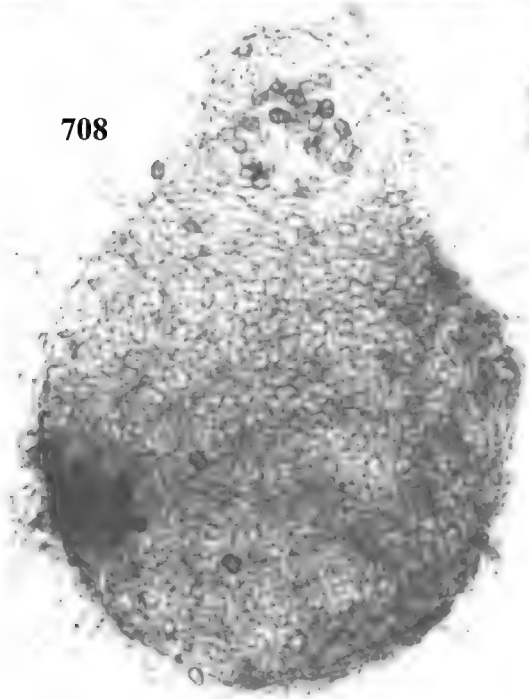
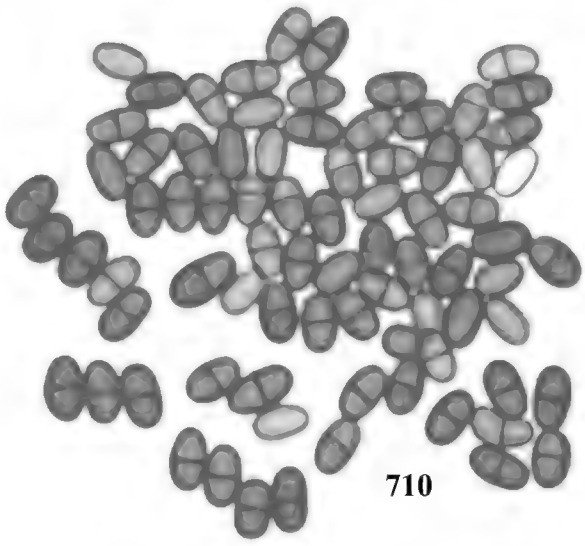


708

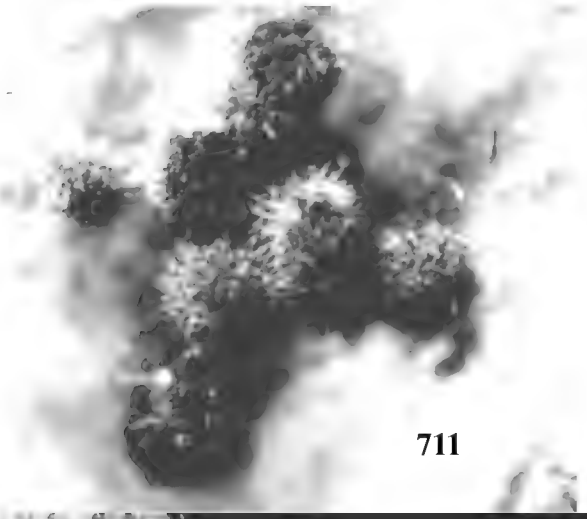




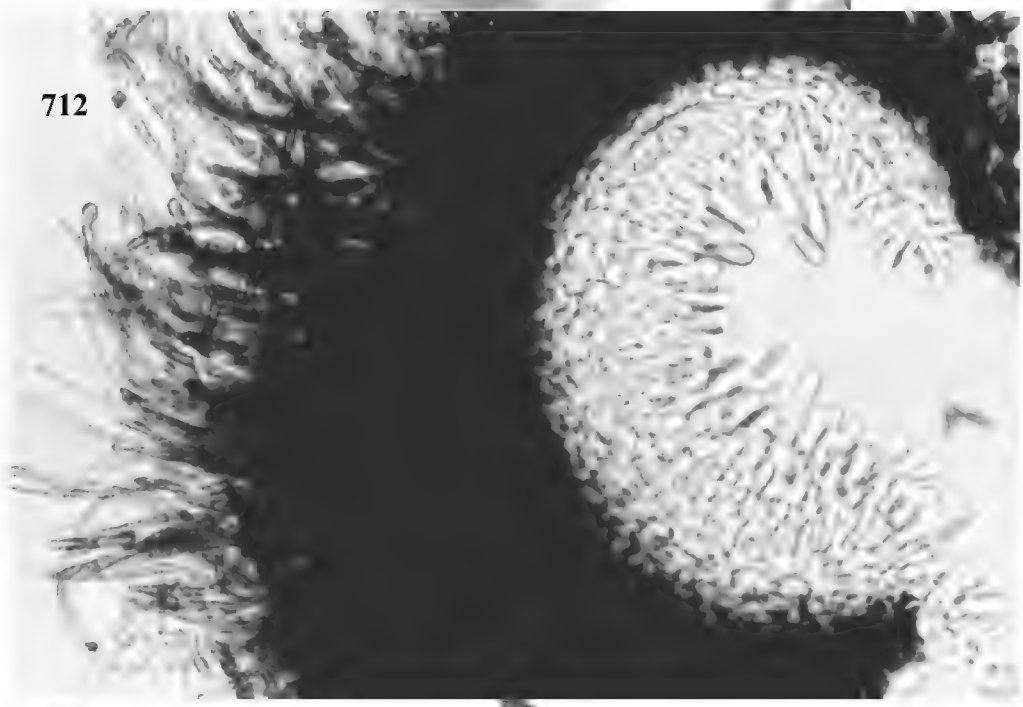
710

1263 ***Diplodia grewiae*** Terjajeva, Bot. Mater. **15**: 154. 1962; Sutton, Mycol Pap. **138**: 115-117. 1975.
HAB In ramunculo putrescenti in sylva; Knysna, South Africa; Sept. 13, 1995. MFC-5A016.
DESCR In b/c: Colonia effusa, hyphis aeriis fere nullis, pycnidiis ateris diseperis. Pycnidia solitaria vel gregaria, oblonga ad ovata, atro-brunnea, immersa praeter ostiolum papillatum, 125-310 µm in diam., 250-500 µm alta; peridium crassum, pariete exteriore aspectu superficiali textura angulari modice brunneum parte carbonaceum, pariete interiore pseudoparenchymatosum hyalinum. Conidiophora deficientia. Cellulae conidiogenae orientes ex cellulis peridii intimis, oblongae, ovatae ad obpyriformes, 7-12 µm longae, 3.0-5.5 µm latae, apice enteroblasticae-phialidicae, ore intrinsecus inconspicue incrassato, laeves, hyalinae. Conidia oblonga, medio 1-septata, ad septa non-constricta, (15-)16.5-20(-23) x (7.0-) 7.5-8.5(-10) µm, apice rotundata, basi rotundata vel frequenter obtusa 2-3 µm lata, in pagina sine ornamentatione, brunnea.

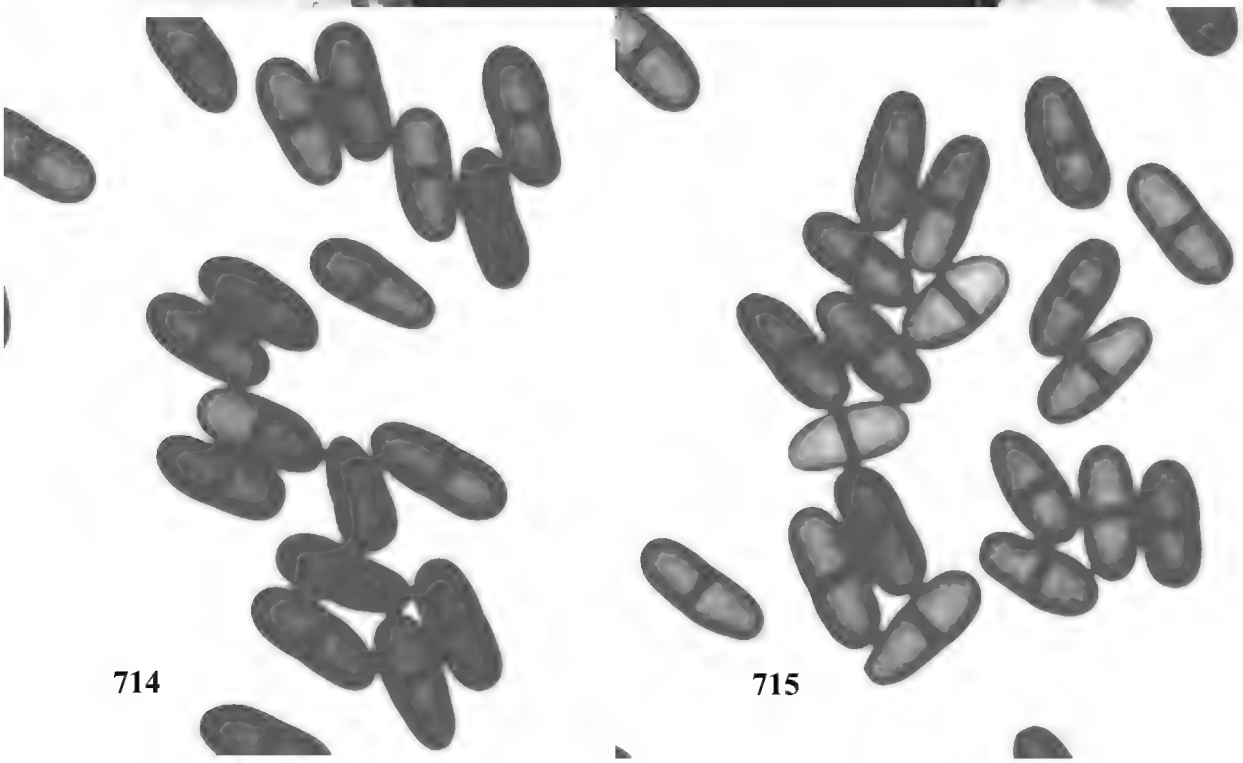
In CMA: Pycnidia solitaria vel gregaria, praecipue superficialia, dense pilifera praeter ostiolum; pili simplices vel parce ramosi, septati, asperi vel dense bullati, inferne 3.5-5.0 µm lati, brunnei, apicem versus leviter angustati subhyalini ad hyalini 2.0-3.0 µm lati, apice obtusi.
MEM In the present fungus pycnidia are immersed except papilla on b/c-medium and probably on substrates in nature, but on CMA they are superficial and densely covered with characteristic hairs.
ICO P711: pycnidia on CMA, x 40.
P712: a pycnidium in section, CMA, x 400.
P713: conidiogenous cells, x 1000.
P714, P715: conidia, x 1000.



711



712



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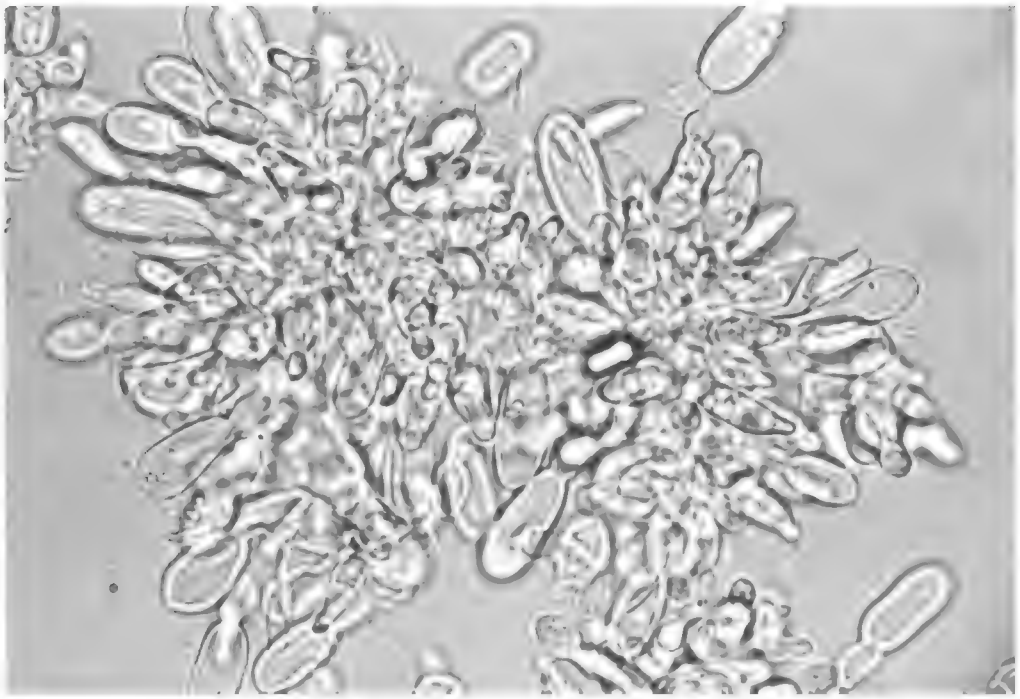
715

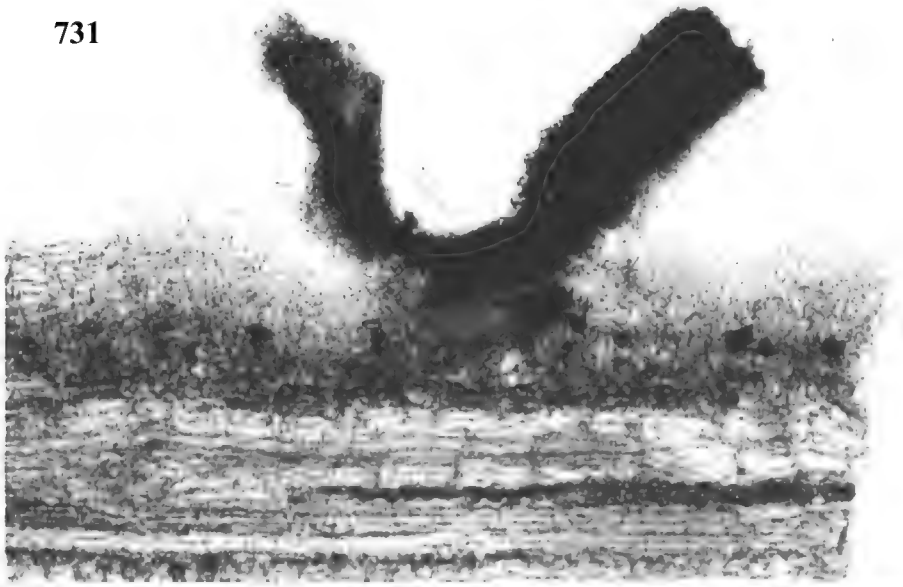


713

1264 ***Discosia caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo putrescenti in sylva; Knysna, South Africa; Sept. 13, 1995. **Typus**: b/c cultura exsiccata, MFC-5A157.
DESCR A congenere *Discosia artocreas* (Tode) Fr. differt septatione conidii. In b/c: Colonia effusa, hyphis aeriis sparsis, pycnidiis fuscis dispersis. Pycnidia subepidermalia, disciformia, dimidiata, atro-fusca, postea erumpentia. Conidia subcylindrica, leviter curva, 4-euseptata, (17-)21-27 x 3.0-4.0 µm, cellula juxta cellulam basalem longissima, setulae 3-8 µm longae, ca. 0.8 µm latae, subhyalinae, modice brunnea mucosa in massa.
In CMA: Colonia modice crescens, parte centrali modice brunnea pycnidiis dispersis, circumferentia late diffusa pallidior.
MEM The present species is similar to *Discosia poikilomera* Fairman apud Millspaugh & Nuttall (1923), another species with 5-celled conidia, but differs from the latter in the position of septa.
REF Subramanian, C. V., & R. Chandra-Reddy. 1974. Kavaka **2**: 57-89. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I. ** Vanev, S. G. 1991. Mycotaxon **41**: 387-396. Species conception and sections delimitation of genus *Discosia*. ** Vanev, S. G. 1993. Mycotaxon **49**: 195-197. => *D. jordanovii* sp. nov. ** Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan. p. 299-327. ** Nag Raj, T. R. 1994. Mycotaxon **50**: 349-354. => *D. eucalypticola* sp. nov. ** Vanev, S. G. 1995. Mycotaxon **56**: 81-83. => *D. petrakii* sp. nov.
ICO P731: section of conidioma, showing upper sterile wall (artificially turned over in cutting) and basal fertile layer (conidia mostly washed away), b/c, x 200.
P732: conidia, x 1000.
P733: conidia (phase contrasst), x 1000.

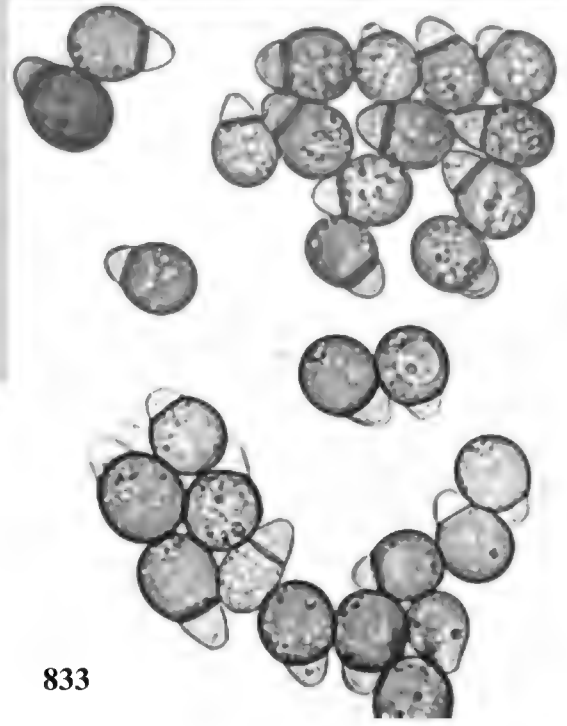
1265 ***Endophragmiella bigena*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre; Ulu Gombak, Selangor, Darul Ehsan, Malaysia; June 12, 1995. **Typus**: b/c cultura exsiccata, MFC-5T047. **Etym.**: *bigena* = conidiophore-both percurrent and sympodial proliferation.
DESCR In CMA: Colonia tarde crescens, fere immersa, atro-grisea, margine restricta. Conidiophora mononematosa, plus minusve semi-macronematosa, dispersa, simplicia vel interdum ramo laterali, septata, 20-100 µm longa, 2.0-3.5 µm lata, pallide brunnea, supra parte fertili sympodialiter vel percurrenter proliferata frequenter curva vel geniuclata. Conidia solitaria, holoblastogena, late obovoidea, infra medium 1-septata, 11.5-19 x 8.5-12 µm, ratio cellulae inferiores : cellulae superiores = 1 : (1.6-)2.4-3.6, laevia, pallide brunnea.
MEM For sporulation CMA is better than b/c.
ICO P833: conidia, CMA, x 1000.
F859: conidiophores, conidiogenous cells and conidia, CMA, x 1000. (in p. 208)

731



732

733

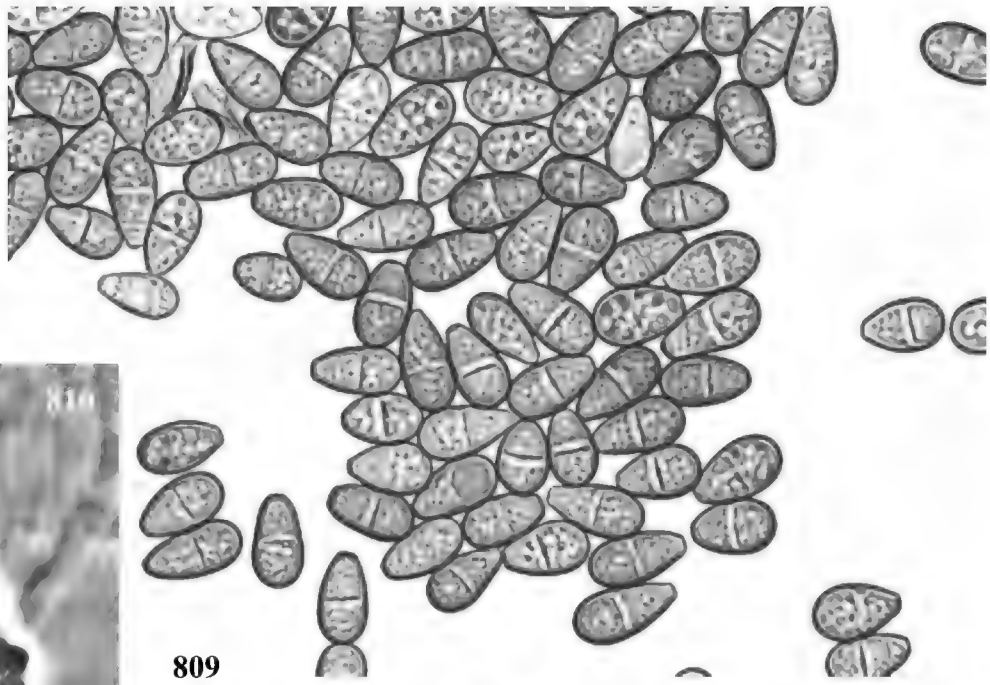


833

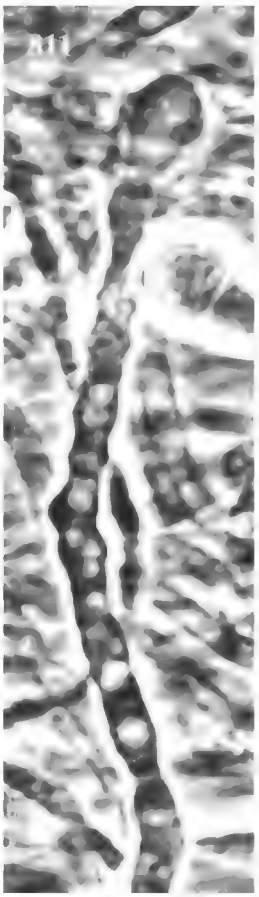
1266 ***Endophragmiella boewei*** (Crane) Hughes, 1979, N. Z. Jl. Bot. **17**: 147.
= = *Endophragmia boewei* Cranae, 1972, Mycologia **64**: 658.
HAB On a dead twig in forest; Knysna, South Africa; Sept. 13, 1995. MFC-5A156.
DESCR On CMA: Colonies slowly growing, dark brownish gray. Conidiophores macronematous, mononematous, erect, long, simple, septate, rigid, more or less setose, brown, smooth, 2.5-3.5 µm wide; apically percurrently proliferating repeatedly, with a chain of obclavate conidiogenous cells. Conidia obovate, 1-septate below the middle, smooth, light brown, 13-18.5 x 8.5-11 µm.
REF Crane, J. L. 1972. Mycologia **64**: 657-662. => *E. boewei*: conidia 13.8-20.8 x 7.7-11.5 µm, subhyaline to light brown. ** T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 67-68. ** Mats. Myc. Mem. **1**, no. 103. 1980.

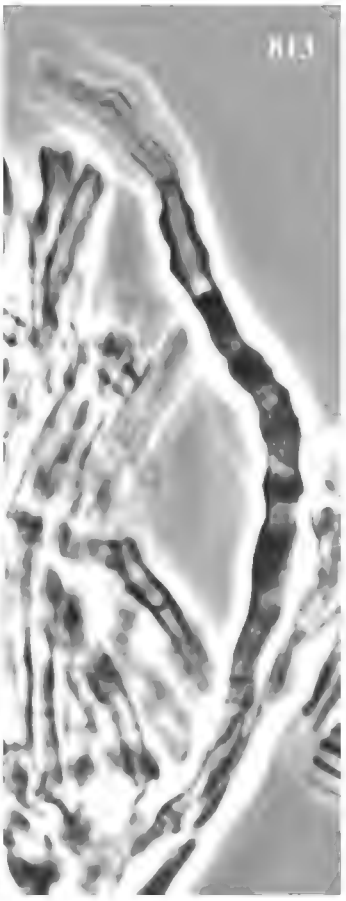
1267 ***Endophrgmiella cylindroellipsoidea*** Matsushima, 1993, Mats. Myc. Mem. **7**, no. 1076.
HAB On a rotten twig; Kirstenbosch National Botanical Garden, near Cape Town, South Africa; Sept. 11, 1995. MFC-5T116.

1268 ***Endophragmiella microaquatica*** (Tubaki) Matsushima comb. nov.
= = *Dactylella microaquatica* Tubaki, Bull. Nat. Sci. Mus. Tokyo **3**: 256-258. 1957.
= = *Monosporella microaquatica* (Tubaki) Petersen, Mycologia **54**: 120. 1962.
= = Endophragmia microacquatica (Tubaki) Matsushima, Ic. Microf. Mats. Lectorum, no. 231. 1975.
HAB On a dead twig in stream; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A059.
DESCR On CMA: Colonies growing moderately, aerial hyphae scant, central part brownish gray and under a lens finely powdery appearance due to abundant conidiation, with wide sterile uncolored diffusing margin. Conidiophores mononematous, micronematous or semi-macronematous, long, simple, septate, not rigid, decumbent, smooth, lower sterile part 2.0-3.0 µm wide, pale brown or subhyaline, upper fertile part percurrently repeatedly proliferating, subhyaline, 2.5-3.0 µm wide. Conidia obovate, 1-distoseptate, 10-16 x 6-7.5 µm, truncate 2.0-2.5 µm wide at the base, smooth, light brown. Chlamydospores catenate, globose to oblong, 9-13 µm in diam., light brown, smooth. No synanamorphosis. No teleomorphosis.
MEM This species has similarity in conidiophore-morphology to *Colispora* Marvanova. (*C. elongata* gen. et sp. nov. in Trans. Br. mycol. Soc. **90**: 607-617. 1988; *Colispora curvata* Nawawi & Kuthubutheen, 1989. Mycotaxon **34**: 297-301).
ICO P809: conidia, CMA, x 1000.
P810, P811, P812, P813, P814: conidiophores, x 2000 (phase contrast).



809





Extrusothecium T. Matsushima gen. nov.

Ad Ascomycetem pertinet.

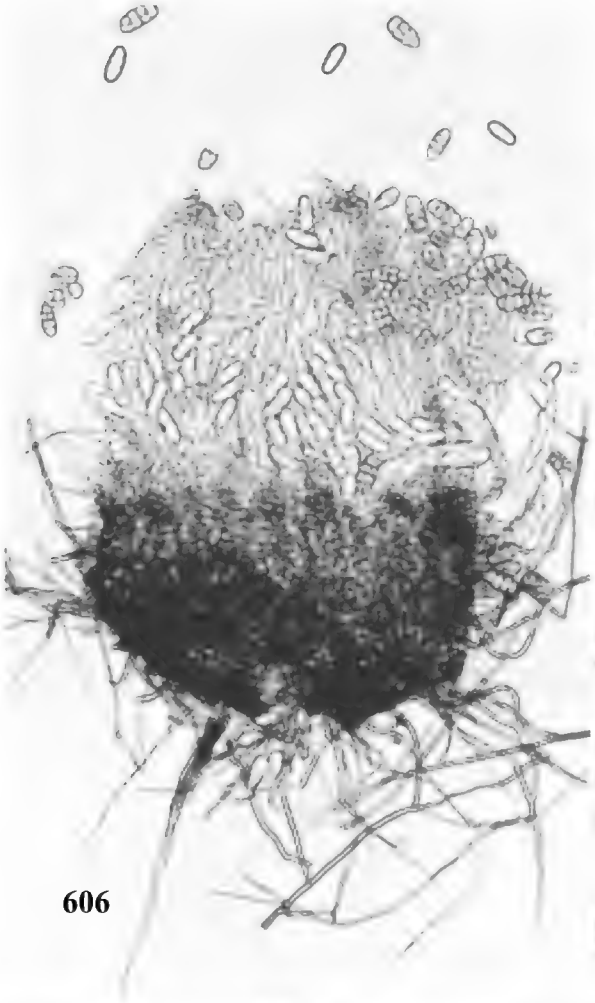
Ascomata sunt pseudothecia, sine stromate, dispersa, solitaria, superficialia vel subimmersa, initio appresse globosa, clausa, brunnea, nuda vel pilosa, peridio membranaceo cellulis angularibus brunneis; postea apice refringentia, extrusa toto hamathecio subhyalino ad pallide luteo-brunneo. Asci bitunicati, cylindrici, apice rotundati sine structura, basi pede brevi, praecipue 8-spori, plus minusve persistentes. Paraphyses abundantes, filiformes, ramosae, sinuolatae, parte coagulates hyalinae. Ascosporae dictyosporae, laeves, hyalinae. Anamorphosis ignota. **Species typica**: *Extrusothecium cafferum T.* Matsushima sp. nov. **Etym.**: *extruso-thecium* = a shortening of *extrosus* + *hamathecium*, i. e. pushed out hamathecium.

1269 ***Extrusothecium cafferum*** T. Matsushima sp. nov.

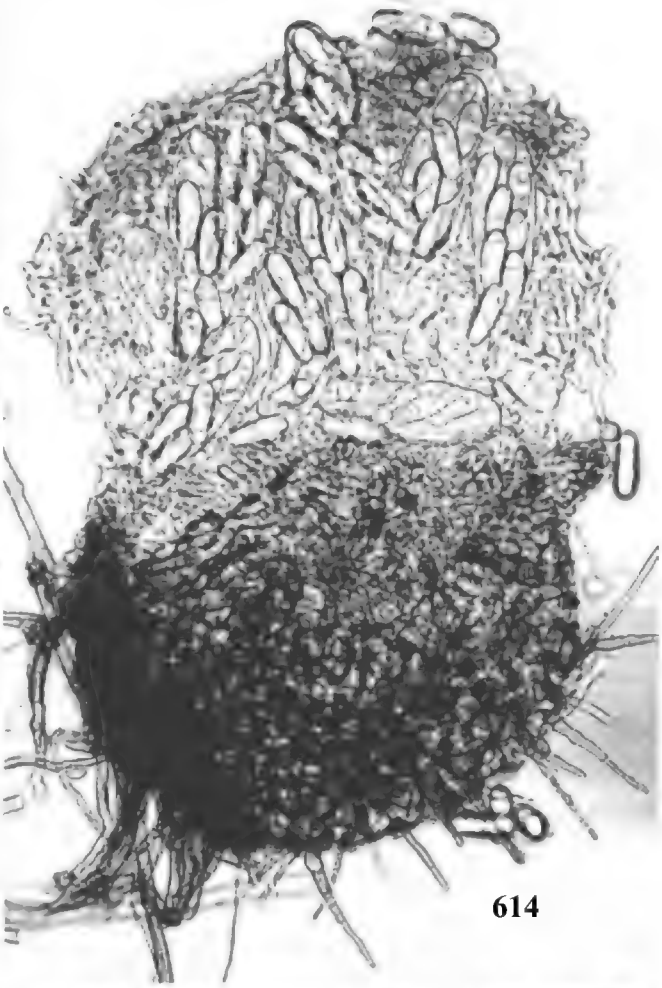
HAB In ramunculo mortuo sicco denigrati fruticis spinosi; prope Vryburg (on the road side of National Route 14), South Africa; Sept. 8, 1995. **Typus**: b/c cultura exsiccata, MFC-5A090.

DESCR In b/c: Colonia effusa, hyphis aeriis modice brunneis sparsis. Ascomata sunt pseudothecia, sine stromate, dispersa, superficialia vel semi-immersa, solitaria, initio appresse globosa, clausa, atro-brunnea, 100-225 µm in diam., pilis brunneis septatis non-propiis; peridio membranaceo brunneo, aspectu superficiali cellulis angularibus; postea apice refringentia et extrusa toto hamathecio subhyalino ad pallide luteo-brunneo. Asci bitunicati, cylindrici, apice rotundati sine structura, basi pede brevi, 75-110 x 20-30 µm, praecipue 8-spori. Paraphyses abundantes, filiformes, ramosae, sinuolatae, parte coagulates hyalinae. Ascosporae oblongi-ellipsoideae, 20-25 x 9-12.5 µm, transverse 3-septatae, ad septa leviter constrictae, in quoque segmento 0-1 septi longitudinali vel plus minusve obliqui praeditae, laeves, hyalinae, frequenter pallide brunneae in statu veto. Anamorphosis ignota. In CMA: Colonia modice crescens, fere immersa, atro-fusca, margine diffusa, ascomatibus paucis circum inocula (ex PDA) dispersis.

ICO P606: an ascoma with extruded hamathecium, CMA, x 200.
P613: asci, x 1000.
P614, P615: ascomata with extruded hamathecia, b/c, x 400.
P616, P617: asci, x 1000.
F854: ascospores, b/c, x 1000. (in p. 206)

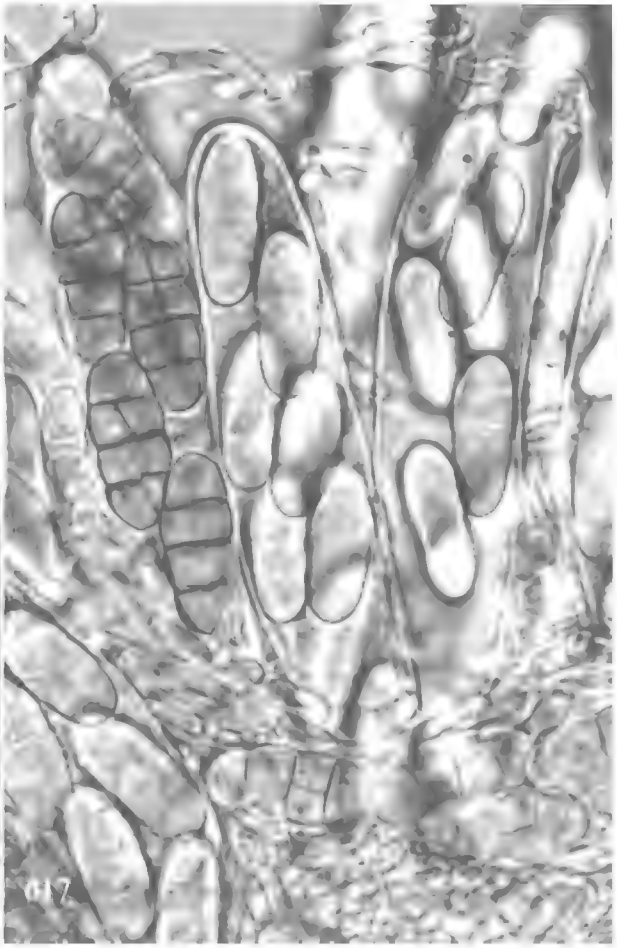


606



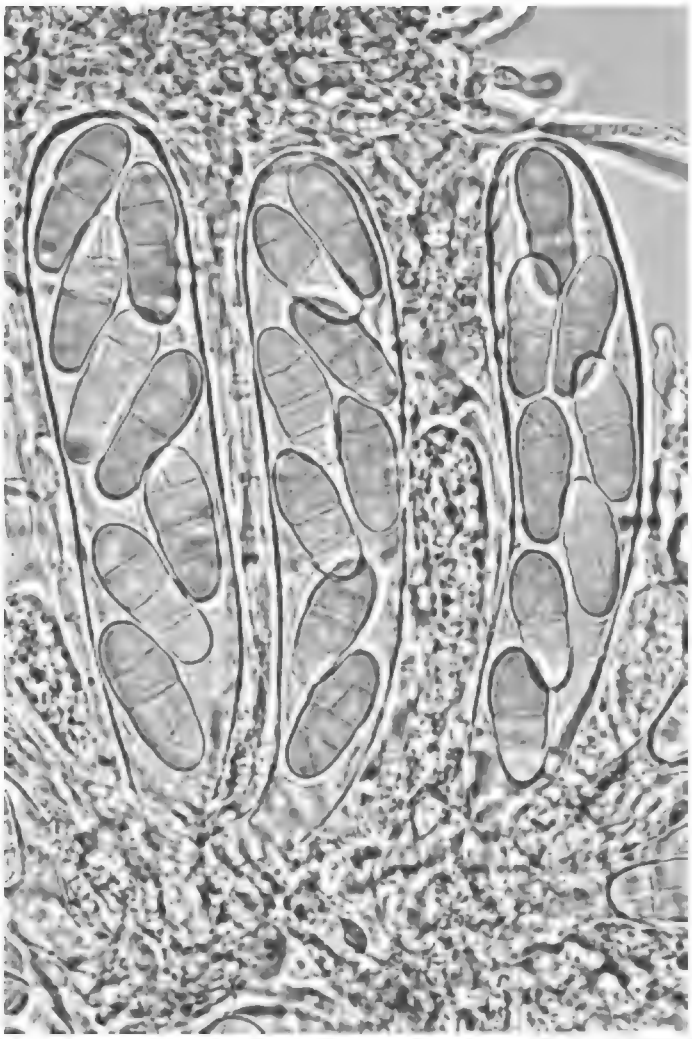
614

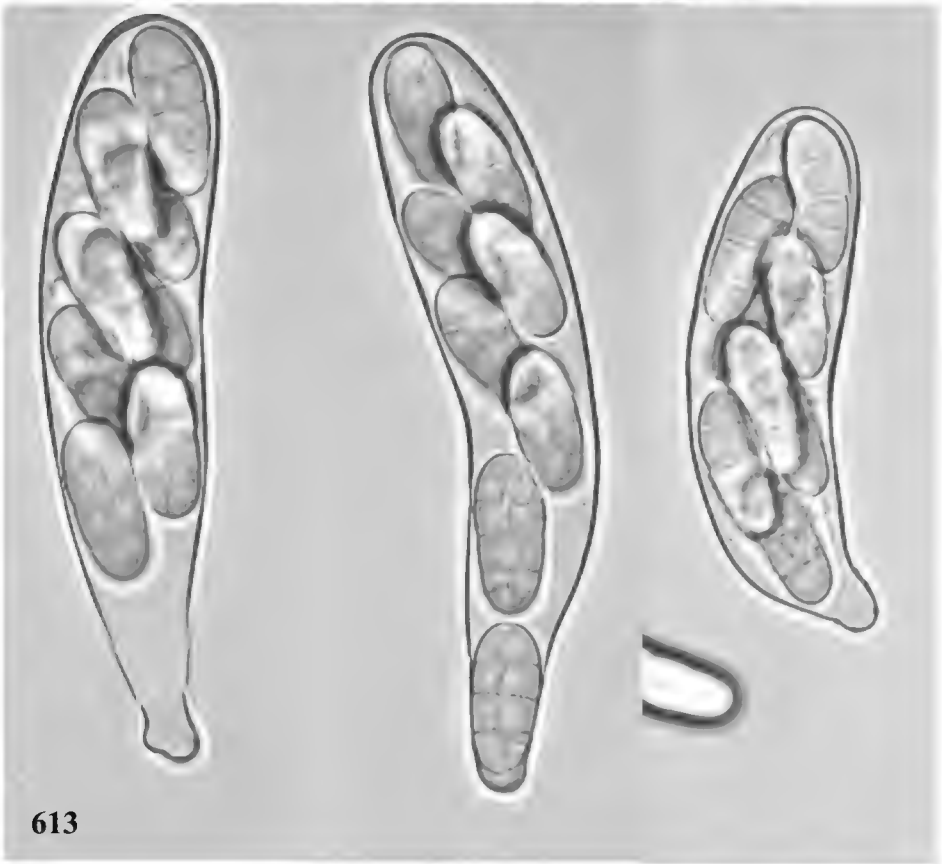
615



617

616





613

1270 ***Flabellocladia tetracladia*** (Nawawi) Nawawi, 1973. Mal. Jour. Soc. **2**(A): 55. 1973; Trans. Br. mycol. Soc. **85**: 174-177. 1985.

HAB In folio mortuo arboris latifoliae; Nose Town, Osaka Pref., Japan; Feb. 2, 1996. MFC-6H054.

DESCR On CMA: Colonies growing slowly, with sparse aerial hyphae, with more or less wet appearance, orange colored. Vegetative hyphae branched, septate, non or lightly constricted at the septa, 2.0-3.5 µm wide, smooth, uncolored. Conidiophores micronematous; conidogenous cells incorporated in repent vegetative hyphae or terminal, laterally with a branchlet which sympodially proliferating, smooth, uncolored. Conidia blastic, composed of an axis and 2-5, mainly 4 radiating branches at its apex; axes slendery clavate, 20-30 µm long, 1-3-septate, truncate at the base 1.5-2.0 µm wide, widen upward to 2.5-4.0 µm; branches developing more or less synchronously at the tip of the axis, cylindric, lightly narrowed toward the both ends, smooth, uncolored; 25-65 µm long, 2-5-septate, 2.5-4.0 µm wide about the middle, at the junction to the axis constricted to 1.0-2.5 µm, mainly about 1.5 µm. No synanamorphosis.

REF Santos-Flores, C., A. M. Nieves-Rivera, & C. Betancourt, 1995. Carribean J. Sci. **31**: 49-56. => *F. tetracladia* from Puerto Rico.

ICO P876, P877: young conidia, showing synchronous development of conidial arms, CMA, x 1000 (phase contrast).

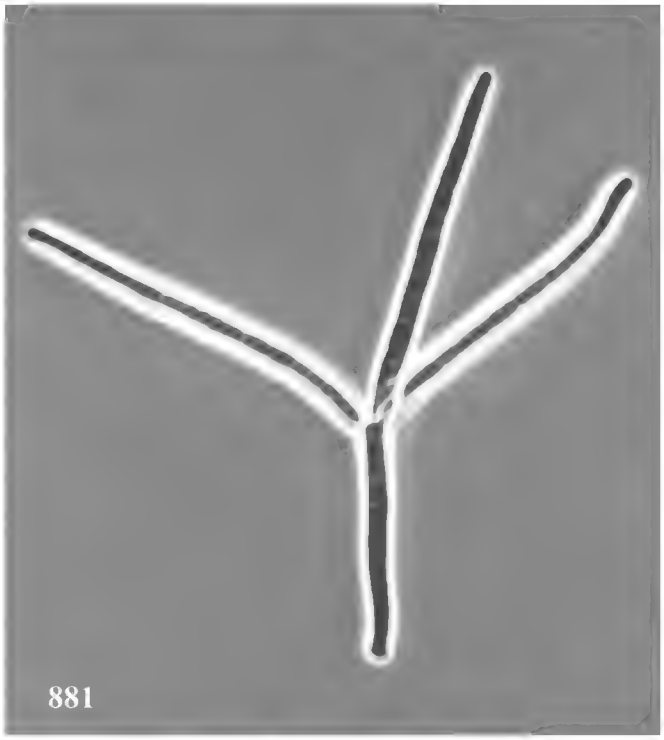
P878, P880, P881: conidia, x 1000 (phase contrast).

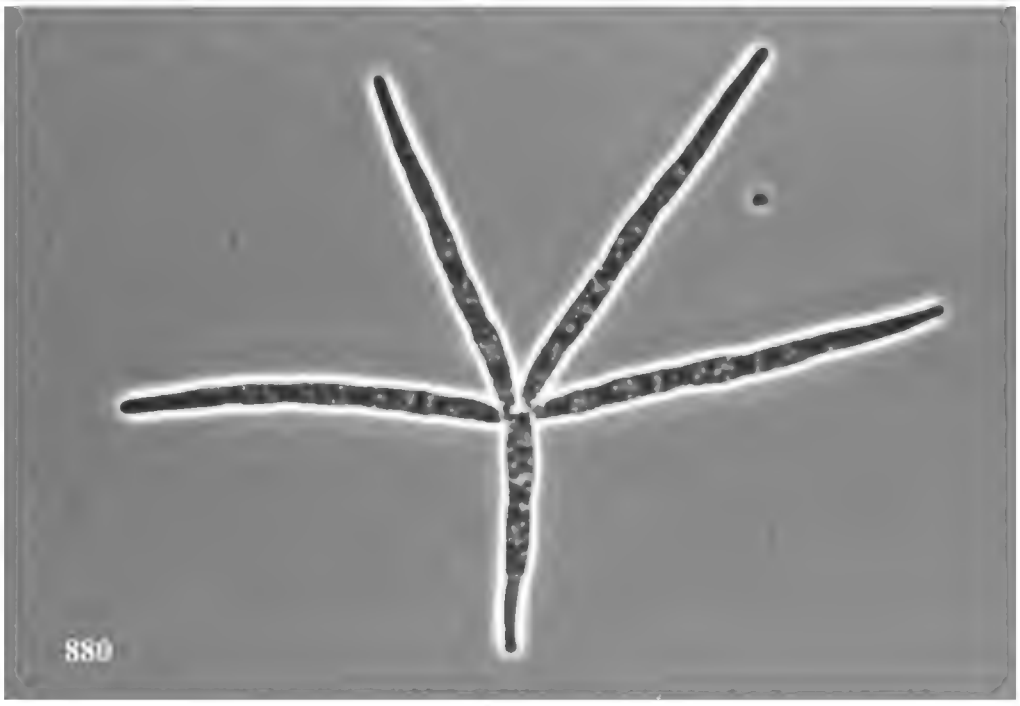
F879: conidiophores and conidiogenous cells, CMA, x 1000. (in p. 212)


876

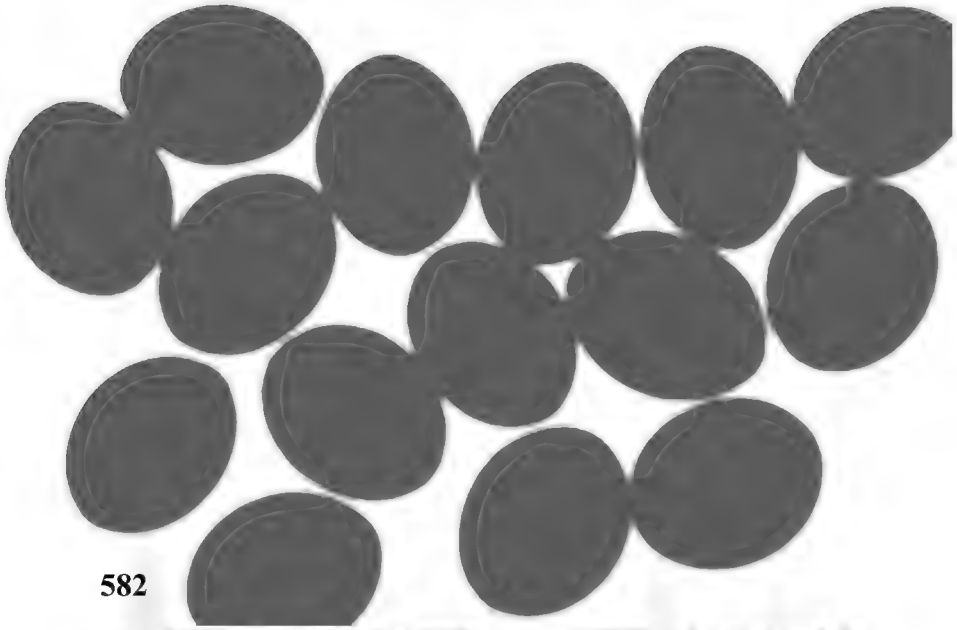

877


878

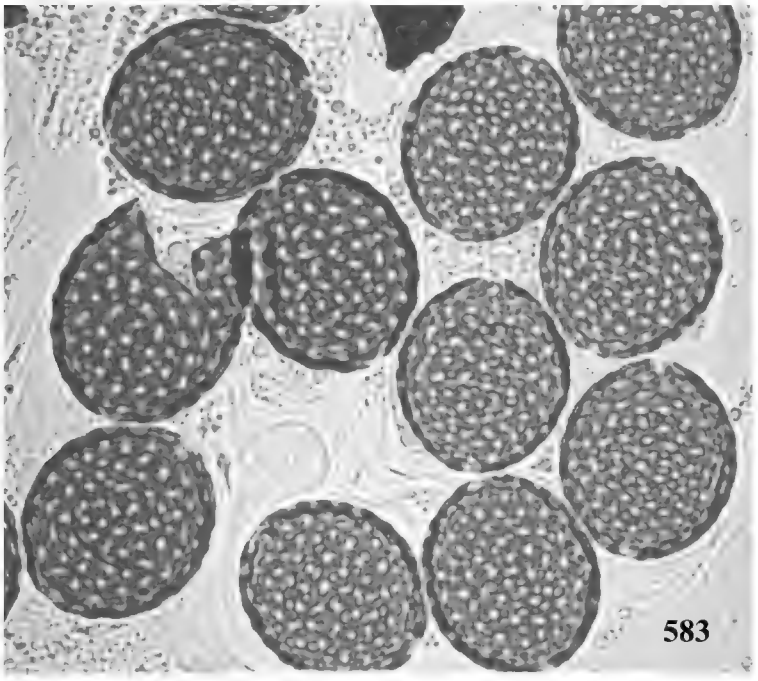

881


880

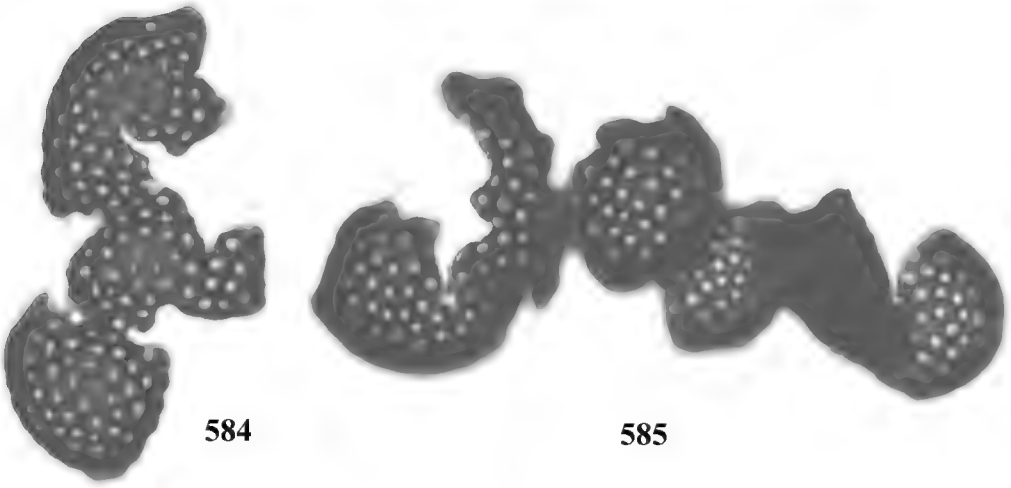
1271 ***Gelasinospora caffera*** T. Matsushima sp. nov.
HAB Ex solo; Pella Mission Station, South Africa; Sept. 9, 1995. **Typus**: CMA cultura exsiccata, MFC-5K332.
DESCR In CMA: Effusa, hyphis aeriis sparsis, pallide brunnea. Perithecia dense dispersa, globosa ad subglobosa, papilla ostiolata, 240-375 µm in diam., atro-brunnea, fere nuda; peridio aspectu superficiali textura angulari brunneo. Asci cylindrici, apice annulo, pede brevi angustato, uniseriate 8-spori. Ascosporae late ellipsoideae, 22.5-27.5 x 18.5-21 µm, ratio usque 1 : 0.75 ad 0.90, atro-fuscae, episporio perforato (foveae circulares 0.8-2.0 µm in diam. ad ellipticae 1.2-2.4 x 0.8-1.2 µm), utrinque terminaliter poro uno ca. 1 µm in diam. praeditae, maturitatem solitarie emittentes. Anamorphosis ignota.
MEM This species is smilar to *Gelasinospora varians* Furuya & Udagawa (in Trans. mycol. Soc. Japan **17**: 314. 1977) in ascospore dimension; in the latter the ascospores are 22-26 x 16-20 µm.
REF Cain, R. F. 1950. Can. J. Res. **28 C**: 566-575 & 4 pls. ** Cailleux, R. 1972. Bull. Soc. mycol. Fr. **87**: 461-626. ** Arx, J. A. von. 1982. Persoonia **11**: 443-449. => A key to 31 spp. of *Gelasinospora*. ** Khan, R. S., & J. C. Krug. 1989. Mycologia **81**: 226-233. => 4 new spp.
ICO P582: mature ascospores, CMA, x 1000.
P583: squashed young ascospores (in a flattened out state), x 1000.
P584, P585: mature ascospores strongly squashed, x 1000.



582



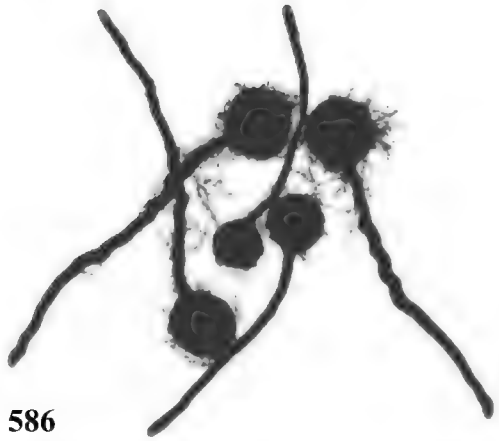
583



584 585

1272 ***Gnomonia bicolor*** T. Matsushima sp. nov.
HAB In folio putrescenti arboris latifoliae; Senri Park, Toyonaka City, Osaka Pref., Japan; March 1996.
Typus: CMA cultura exsiccata, MFC-6M120. **Etym.**: *bicolor* = two-colored, i. e. ascoma with pale brown globose base and dark brown long narrow neck.
DESCR In CMA: Colonia modice crescens, pallide roseola, hic illic caespitibus mycelialibus parvis albis. Ascomata dispersa, e basi globosa et collo (raro 2 collis) longo angusto ridigo constantia: basis in agaro immersa, fere nuda, 120-320 µm in diam., peridio membranaceo cellulis angularibus pallide brunneis; collo cylindrico frequenter sinuolato 780-1750 µm longo 20-32 µm lato atro-brunneo, ex hyphis rectis parallelibus 2.5-5.0 µm latis septatis luminibus deminutis laevibus conglutinatis brunneis constanti, apice ostiolo non-piloso. Asci numerosi, unitunicati, fasciculati, cylindro-fusiformes, apice annulo refractivo distincto, basi pede attenuato fatiscenti in statu praecoci, ad maturitatem in cavitate ascomatis liberi, 8-spori in fasciculo, deliquescentes. Ascosporae cylindro-fusiformes, medio 1-septatae, ad septum leviter constrictae, 12.5-17.5 x 2.0-2.5 µm, laeves, hyalinae, sine appendicibus terminalibus, pro gutta mucosa hyalina ex ostiolo exsudantes. Ascomata serotina et tarde matura (plus quam unus mensis).

Anamorphosis: *Dendrodochium.* Conidiomata sporodochia, passim aggregata, pulvinata, nec setis, nec hyphis specialaibus, stromate brunneo plus minusve immarginato, 85-215 µm in diam.; conidiophora e stromate orientia, irregulariter ramosa, septata, pallide brunnea; cellulae conidiogenae terminaliter vel lateraliter conidiophoris oriundae, solitariae vel 2-3 in fasciculo dispositae, breviter cylindricae, apice angustatae, enteroblasticae-phialidicae, ore intrinsecus incrassato, subhyalinae ad hyalinae. Conidia botuliformia, leviter curva vel recta, 4-8 x 1.5-2(-2.5) µm, continua, laevia, uda, hyalina.
MEM Cultures ceased to produce ascomata quickly. ** For the assignation of this fungus the following taxa were taken into consideration: *Gnomonia* Cesati & de Notaris (1863), *Spumatoria* Massee & Salmon (1901), *Kasterskya* Petrak (1940), and *Kathistes* Malloch & Blackwell (1990).
REF Mueller, E., & J. A. von Arx. Beitr. Kryptogamenfl. Schweiz 11(2). Die Gattung der didimosporen Pyrenomyceten. 1962. ** Valldosera, M., & J. Guarro. 1989. Mycol. Res. **92**: 113-116. => *Klasterskya coronata* sp. nov. ** Noordeloos, M. E., H. A. van Kesteren, & J. W. Veenbaas-Ruks. 1989. Persoonia **14**: 47-49. => *Gnomonia radicicola* sp. nov.
ICO P586: ascomata from CMA, x 40.
P587: basal part of ascoma, squashed and ascospores washed away, x 400.
P588: upper parts of ostiolate necks of ascomata, x 400.
P589: a squashed ostiolar neck, showing parallel and conglutinate brown hyphae, x 1000.
P590: an ascus with a foot still attached, x 2000.
P591: mature asci, their basal parts disintegrated, x 2000.
P592: ascospores, x 1000.
P593: peridium of ascoma in surface view, x 1000.



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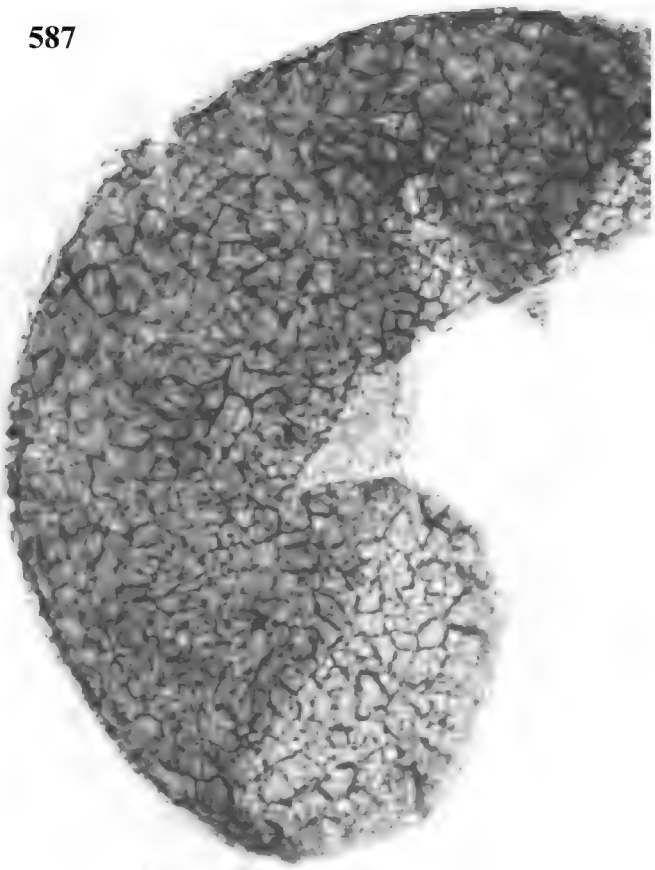

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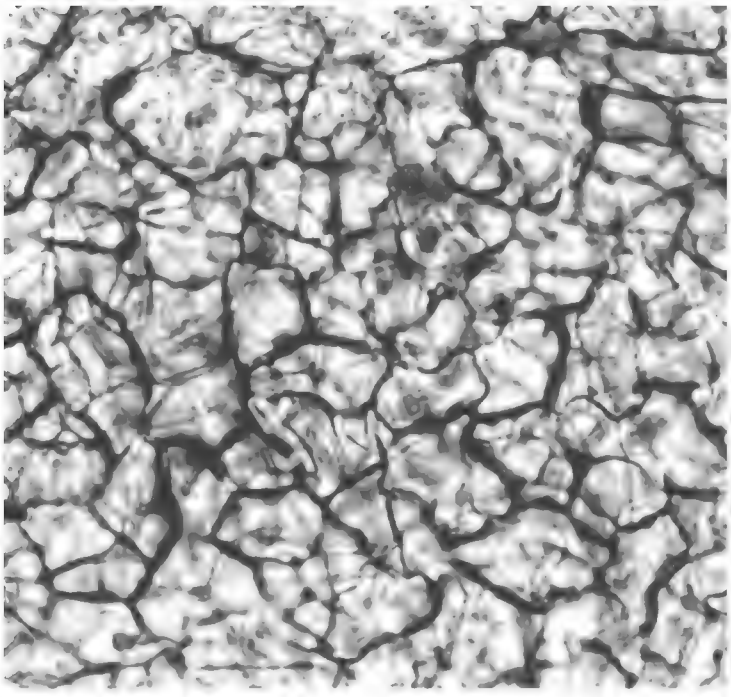

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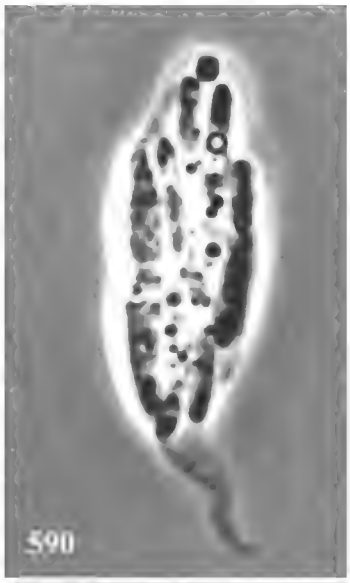
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1273 ***Harknessia eucalypti*** Cooke apud Cooke et Harkness, Grevillea **9**: 85. 1881.
HAB On dead leaves of *Eucalyptus globulus*; near Tzaneen, South Africa; Sept. 26, 1995. MFC-5A217.
DESCR On CMA; Colony thinly spreading, almost uncolored, having scattered white mycelal tufts and dispersed small black conidiomata. Conidia broadly ventricose, 16-25 x 10.5-13.0 µm, with an inconspicuous longitudinal striation and a basal appendage (a remnant of conidiogenous cell) of 5-17.5 µm long 2.5-3.0 µm wide, smooth, brownish gray, black slimy in mass. Microconidial synanamorphosis not formed.
MEM This is the type species of originally monotypic *Harknessia* Cooke.
REF Rambelli, A. 1962. Giorn. Bot. Ital. **69**: 109-111. *Harknessia eucalypti* in coltura pura. ** Sutton, B. C. 1971. Mycol. Pap. **123**. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I., p. 177-185. ** Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan, p. 365-404. ** Crous, P. W, Wingfield, M. J., & Nag Raj, T. R. 1993. Mycologia **85**: 108-118. *Harknessia* species occurring in South Africa.
ICO P694: conidia, focused on outline, CMA, x 1000.
P695: conidia, focused on the basal appendages, x 1000 (phase contrast).
P696: conidia focused on the longitudinal fissure, x 1000.

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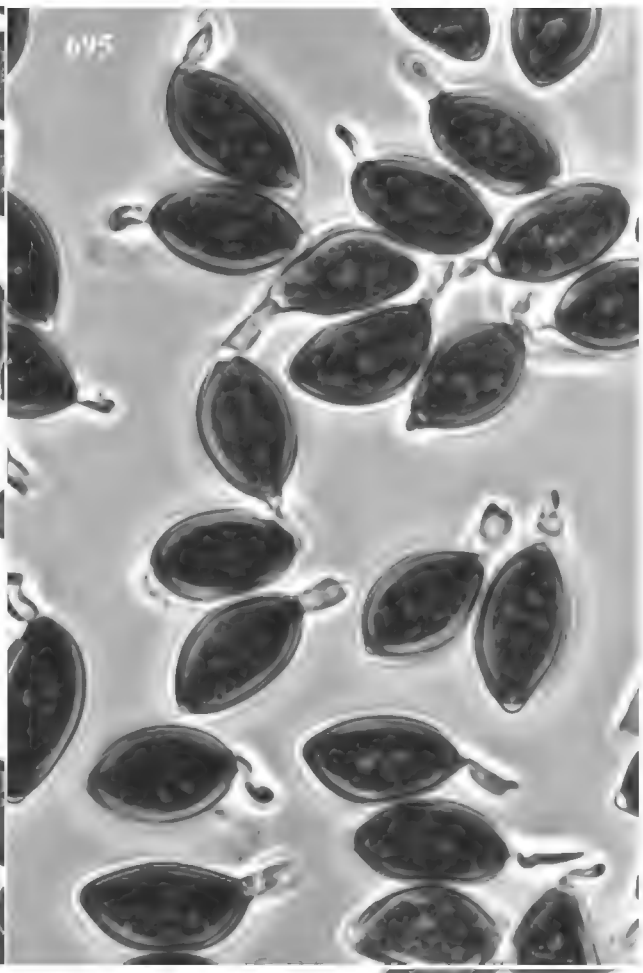

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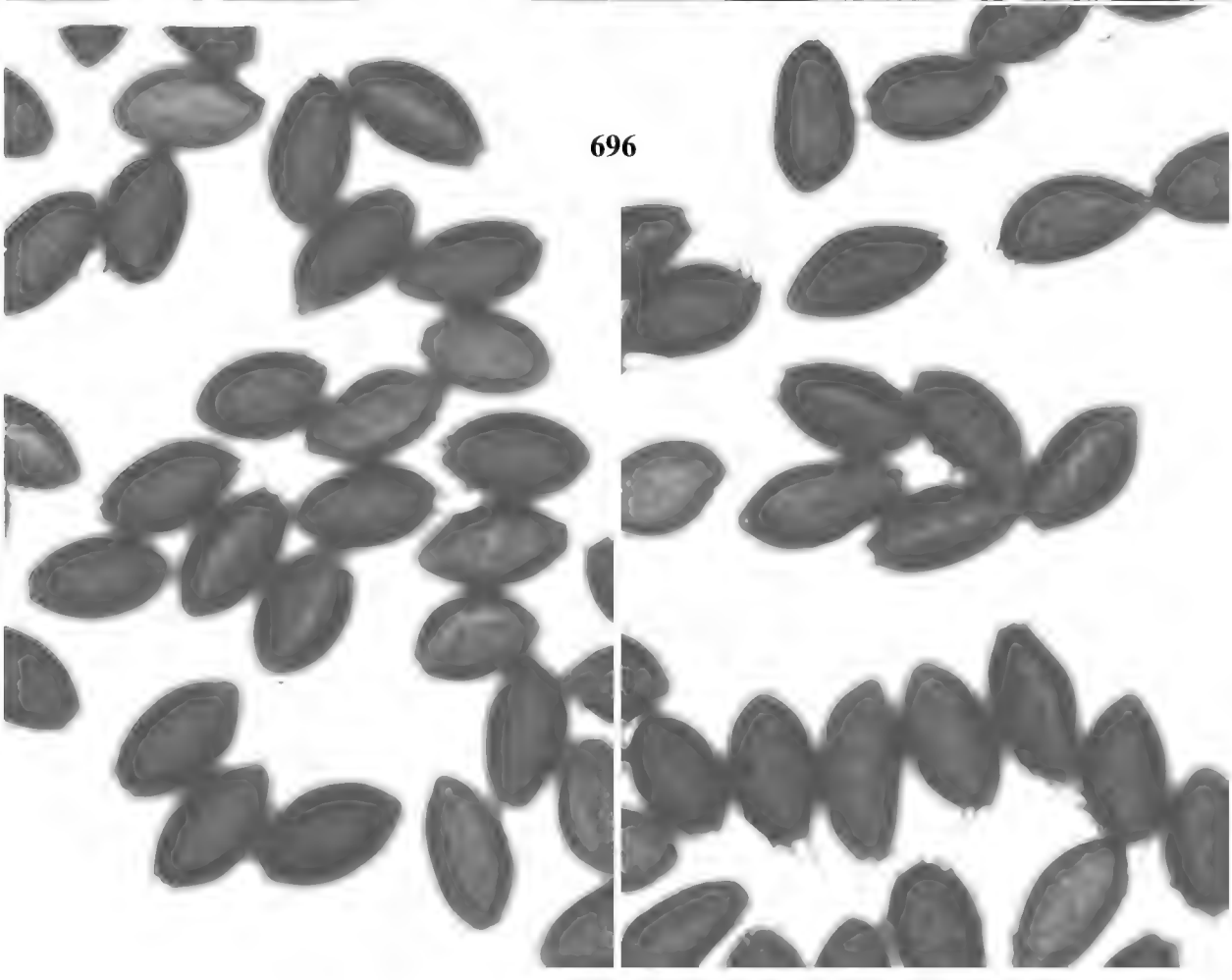


1274 ***Helicoma monilipes*** (Ellis & Johnson) Ellis & Everhart, Proc. Acad. Nat. Sci. Phila. **1894**: 376. 1894.

= = *Helicosporium monilipes* (Ellis & Johnson) Sacc., Syll. Fung. **11**: 639. 1895

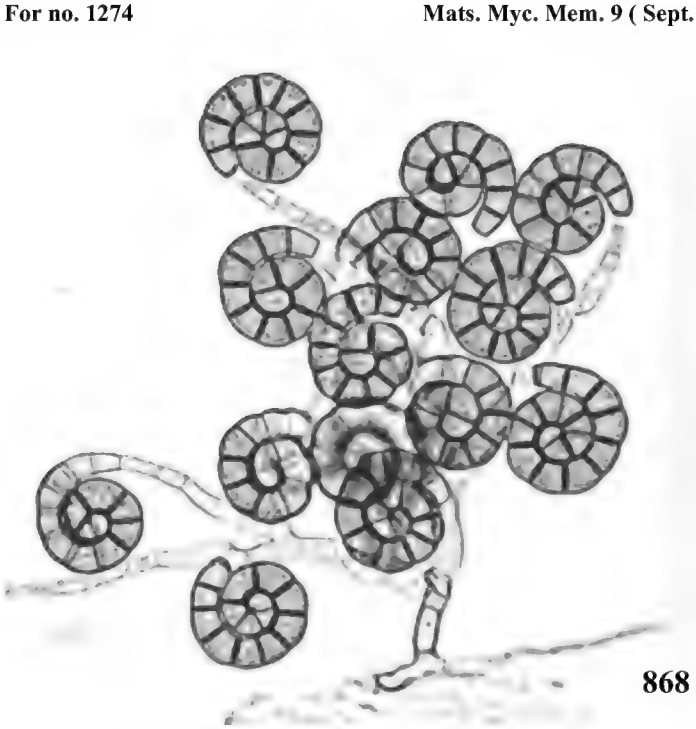
HAB On a decaying *Podocarpus* sp. leaf; Kirstenbosch National Botanical Garden, near Cape Town, South Africa; Sept. 11, 1995. MFC-5A100.

DESCR On CMA: Colonies growing moderately, thin felt-like, yellowish brown, with good conidiation. Conidia 1-2 times tightly two-dimentionally coiled, multiseptate, lightly constricted at the septa, smooth, pale browm, 11-17 µm in diam.; filaments 4-6 µm wide at the thickest. No synanamorphosis. No teleomorphosis.

MEM *H. monilipes* (l. c.) and *H. olivaceum* (Karsten) Linder, 1929 [= *Helicopsis olivaceus* Karsten, Rev. Myc. **11**: 96. 1889] are similar to each other. Fide Linder (1929), the main differences are: in *H. monilipes*, conidia 14.4-19 µm in diam., 2-times coiled, (7-)10-15-septate, filaments 3.5-5 µm in diam.: and in *H. olivaceum*, conidia 11-15.5 µm in diam., 1.5-1.75-times coiled, 3-12-septate (septa black), 3.6-5.4 µm wide. ** The present species has some similarity to the following two species. *Troposporella fumosa* Karsten, 1892, Hedwigia **31**, p. 299; in Ellis, M. B. 1971, Dematiaceous Hyphomycetes, p. 85; and Sutton, B. C. 1973, Mycol. Pap. **132**, p. 123-125: and *Helicosporina veronae* Rambelli, 1960, Mycopathologia **13**: 111.

REF Linder, D. H. 1929. Ann. Mo. Bot. Gdn. **16**: 227-389. ** Ichinoe, M. & Kume, H. 1970. Trans. mycol. Soc. Japan **11**: 98-108. ** Holubova-Jechova, V. 1979. Ceska Mykol. **33**: 138-149. ** Holubova-Jechova, V. 1980. Biologia **29**: 349-353.

ICO P868, P869: conidiophores, conidiogenous cells and conidia, CMA, x 1000.



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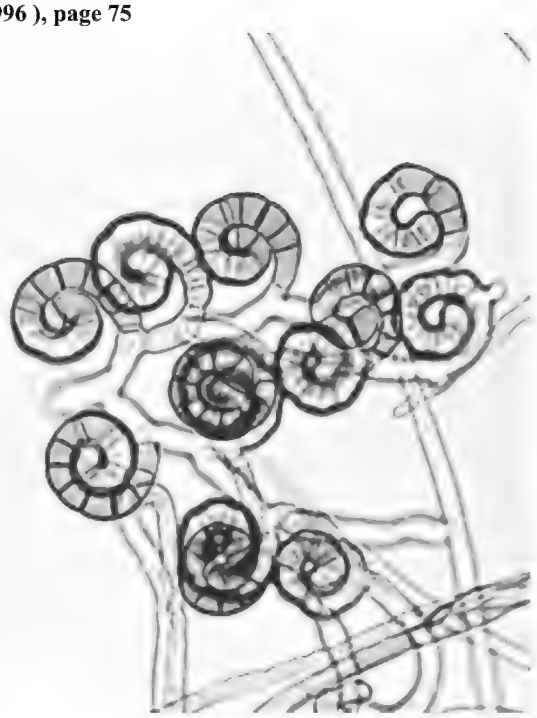

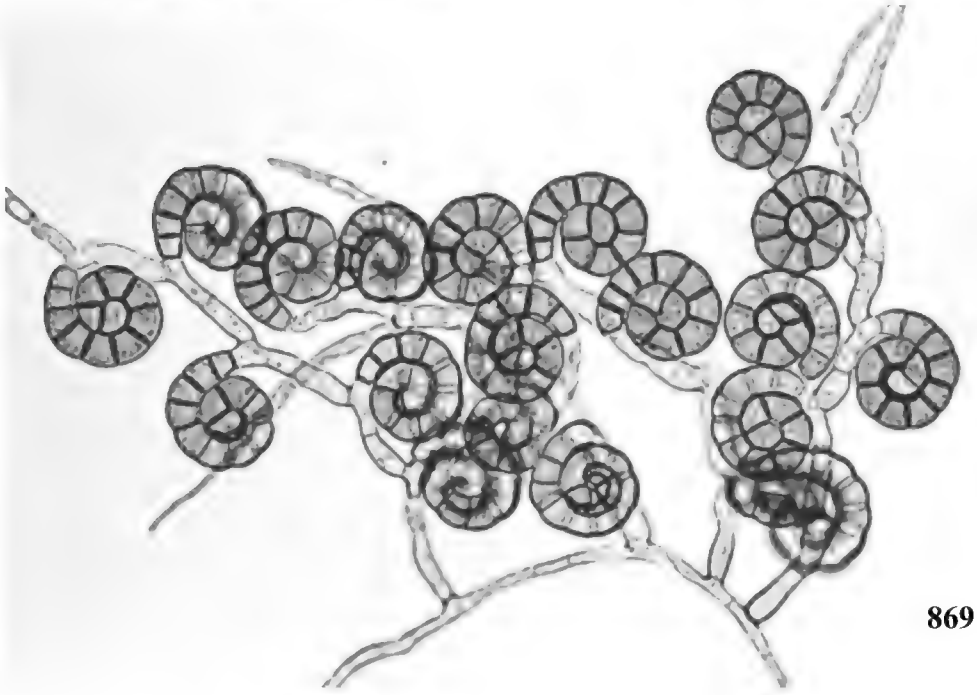

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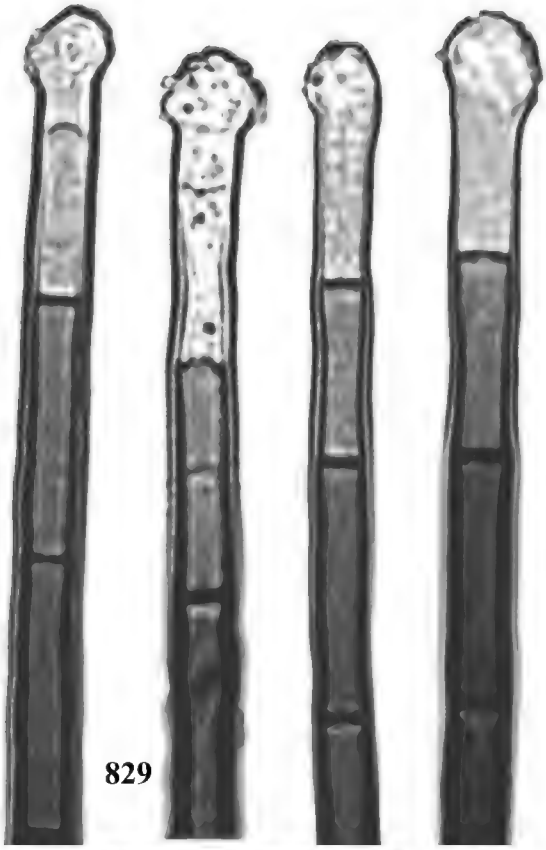
1275 ***Hemibeltrania malaysiana*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: b/c cultura exsiccata, MFC-5T005.
DESCR In b/c: Effusa, hyphis aeriis sparsis. Conidiophora macronematosa, mononematosa, dispersa, solitaria vel fasciculis parvis, cylindrica, simplica, recta, septata, rigida, 100-150 µm longa, brunnea, basi cellula radiatim lobata, apice (cellulae conidiogenae) pallidiora sympodialiter proliferata leviter inflata minute clare denticulata. Conidia blastogena, solitaria, cylindrica utrinque leviter angustata, apice rotundata, basi minute protrudentia, continua, 13-20 µm longa, parte crassissima 3.0-5.0 µm, sine annulo transversali pallescenti, laevia, subhyalina, pallide olivacea sicca in massa. Setae deficientes.
In CMA: Effusa, regione centrali pallide grisea, circumferentia lata pallidissime brunneola, hyphis aeriis modice evolutis. Conidiophora solitaria vel fasciculis parvis, cylindrica, simplicia, plus minusve recta, rigida, septata, (50-)100-150(-400) µm longa, basi radicata, supra basim 4-7 µm lata, supra 3.0-4.5 µm lata, laevia, brunnea, parte apicali (cellula conidiogena) pallidiora, apice leviter inflata minute denticulata. Conidiophora interdum prolifera elongata, capitulo altero ad positionem altiorem formata. Conidia solitaria, raro 2-catenata, 12.5-19.5 x 3.2-4.8 µm. Germinatio conidii in situ frequens. Setae deficientes.
MEM The following spp. are known in *Hemibeltrania* Pirozynski, 1963. Mycol. Pap., C.M.I. **90**. *Hemibeltrania cinnamomi* (Deighton) Pirozynski, 1963, the type species. *Hemibeltrania nectandrae* (Batista & Maia) Pirozynski, 1963. *Hemibeltrania navicularis* Sutton, 1976. *Hemibeltrania echinulata* Kirk, 1983. *Hemibeltrania mitrata* Kirk, 1983. *Hemibeltrania laxa* Castaneda & Arnold, apud Arnold & Castaneda, 1985, Revista del Jardin Bot. Nacional **6**: 54. *Hemibeltrania cymbiformis* Zucconi, 1992, Mycol. Res. **96**: 145-146. ** The new species is similar to *H. laxa* Castaneda & Arnold.
ICO P829: upper parts of conidiophores, b/c, x 2000.
P830, P831: root-like basal parts of conidiophores, CMA, x 2000.
P932: conidia, x 1000.

1276 ***Henicospora minor*** Kirk & Sutton, 1980, Trans. Br. mycol. Soc. **75**: 249.
HAB In ramunculo putrescenti arboris lastifoliae; Cape Town, South Africa; Sept. 13, 1995. MFC-5A013.
DESCR On CMA: Colonies growing slowly, dark brownish gray with narrow whitish margin. Conidia up to 25 µm long, mainly 5-septate, the lower 2 septa dark and clear.
REF Kirk, P. M., & B. C. Sutton. 1980. Trans. Br. mycol. Soc. **75**: 249-253. ** Lunghini, D., & L. Quardaccia. 1990. Accadimia Nazionale dei Lincei **264**: 121-132 + 3 pls. p. 126 & Pl. 1.



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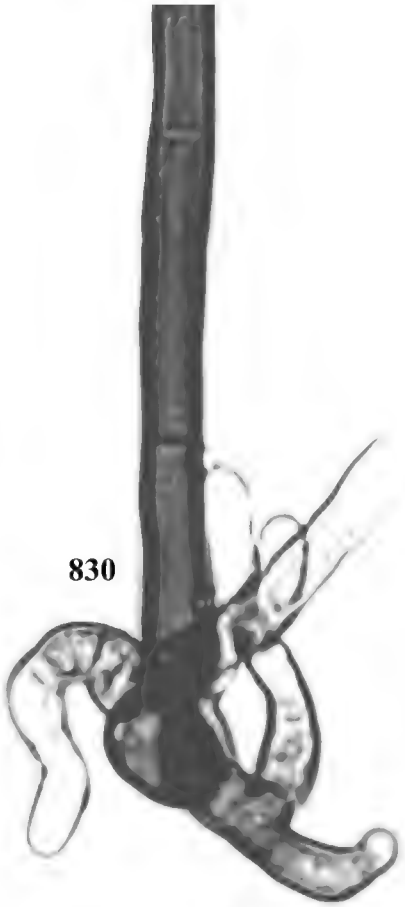

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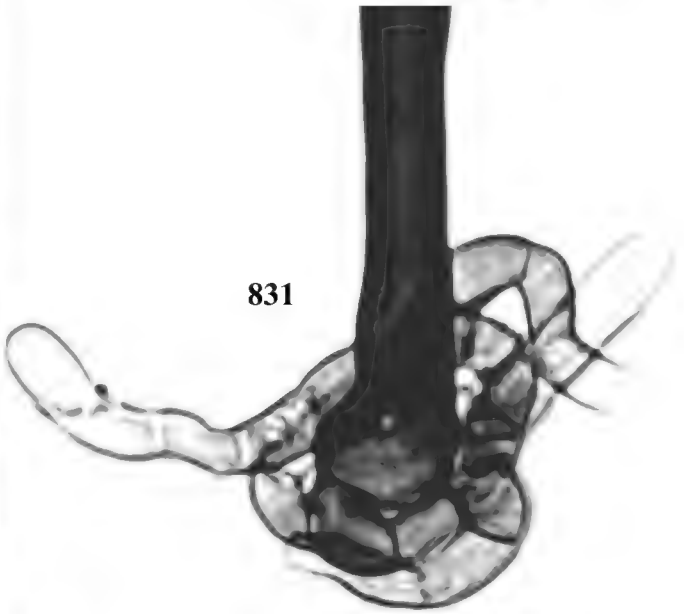

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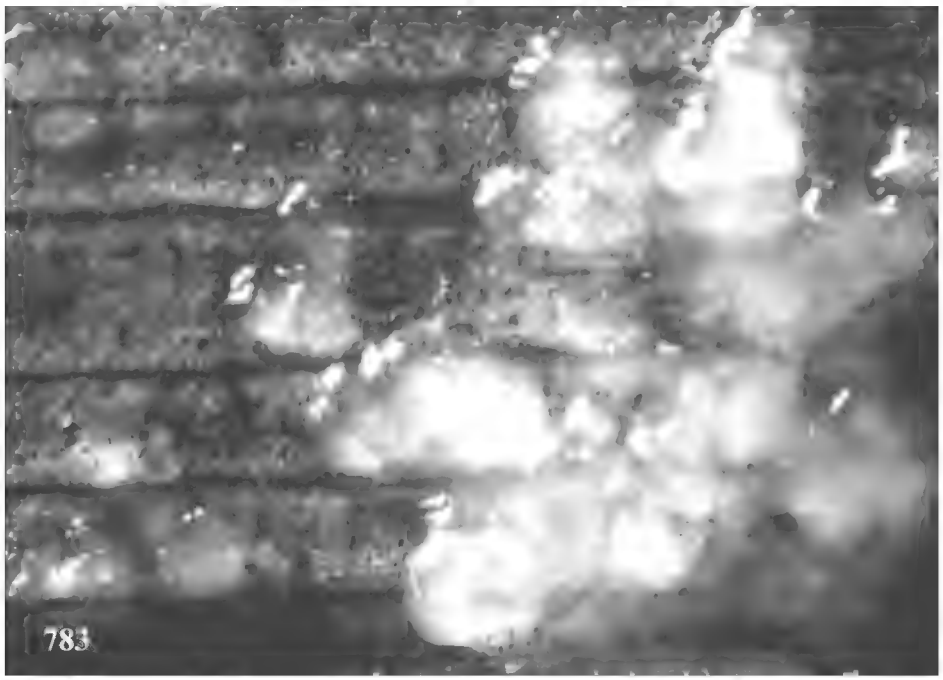
1277 ***Infundibura adhaerens*** Nag Raj & Kendrick, Can. J. Bot. **59**: 544. 1981.
HAB In ramunculo putrescenti rivulo; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A181.
DESCR On b/c: Effused, no aerial mycelia. Sporodochia superficial, solitary or gregarious, cushion-shaped, more or less circular in outline, uncolored, gelatinous, when dry hardly visible. Vegetative hyphae smooth, hyaline, non-characteristic. Conidiophores lacking or short cylindric, bearing conidiogenous cell acro-pleurogenously, arising on thin hyaline basal hyphal stroma. Conidiogenous cells arising directly from basal hyphal stroma or conidiophores, froming densely packed palisadal layer, cylindro-ellipsoidal to cylindrical, (5-)7-12(-16) x 2.0-3.5 μm, smooth, apically enteroblastic-phialidic, fertile loci frequently eccentrically placed. Setae intermixed with conidiogenous cells, arising from conidiogenous cells, long simple sineous septate, with reduced lumina, 1.7-3.0 μm wide, smooth, hyaline. Conidia one-celled, cylindrical, slightly curved and slightly tapering toward ends, roudned at the apex, apiculated at the base, 17-29 x 3.0-5.0 μm, smooth, with an appendix at both ends: a basal one oblique conical tubular and it is an elastic elongation of the basal connection part of a conidiogenous cell at conidial liberation; an apical one funnel-shaped hollow membranous and it is originally rhombic or cylindrical but later the upper gelatinous half is collapsed and disappeared in making slide preparation.
ICO P783: conidiomata on b/c, x 40.
P785: conidia, x 2000 (phase contrast).
P784, P786: sporodochium, showing setae and conidiogenous cells, x 1000 (phase contrast).

1278 ***Isthmolongispora variabilis*** T. Matsushima, Icones Microfungorum A Matsushima Lectorum, p. 90-91.
HAB On a rotten twig in stream; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A190.
DESCR On CMA: Conidia filiform, composed of (3-)6-10-celles connected by isthmi, (37.5-)58-150 x 3.5-5.0 μm, smooth, hyaline, white in mass; occasionally some cells becoming 1-septate.
MEM In the original description (loc. cit. supra): conidia 4-13-celled, 36-136 μm long and 3.5-4.4 μm wide.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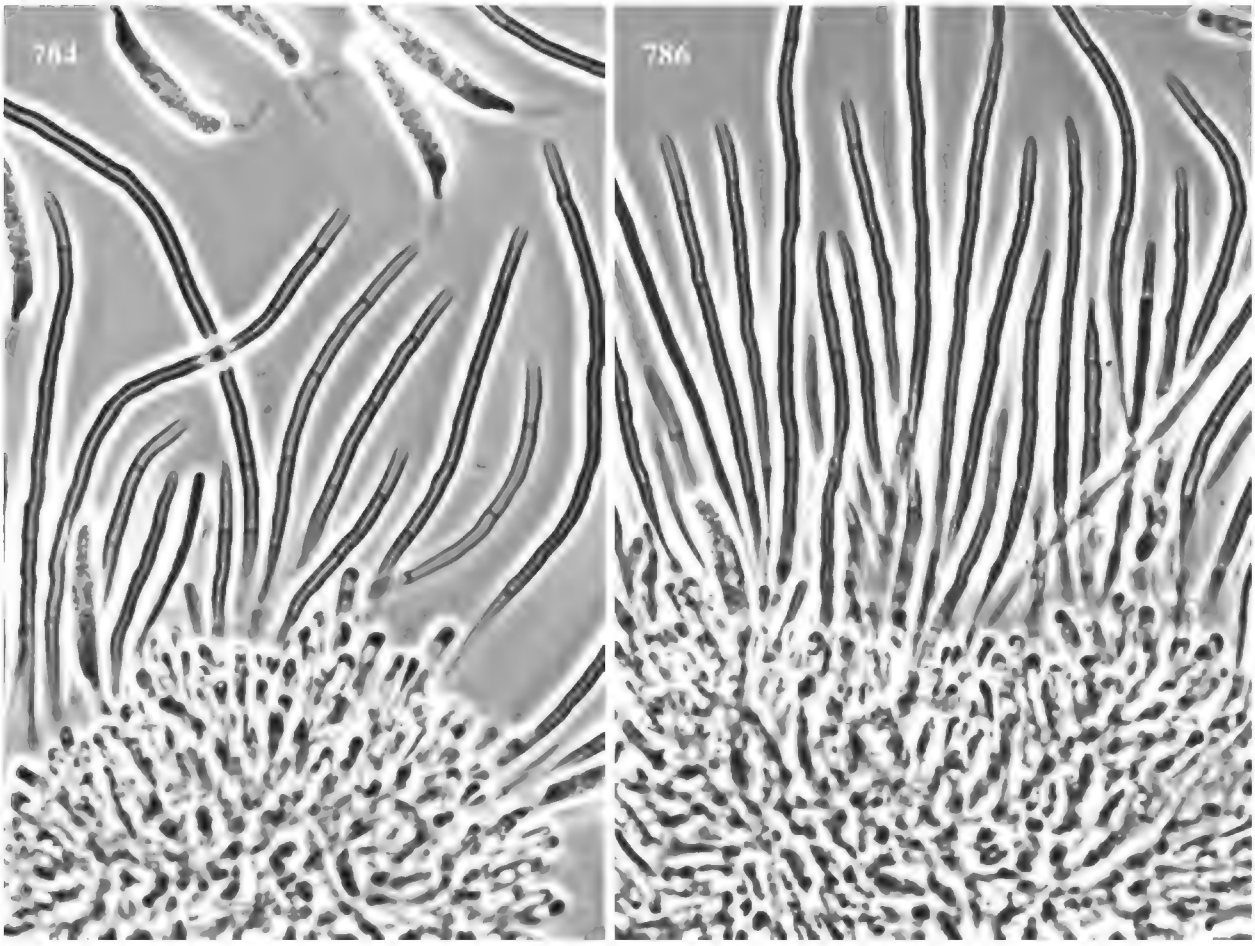
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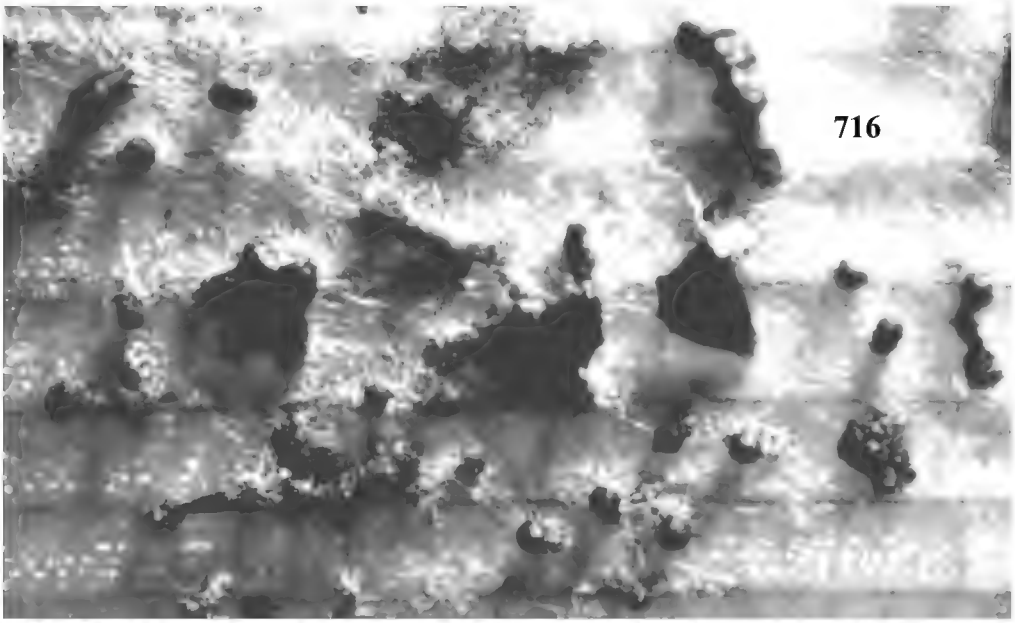
1279 ***Kirramyces caffer*** T. Matsushima anam.- sp. nov.
HAB In gramine mortuo; Spes Bonia, prope Caledon, South Africa; Sept. 12, 1995. **Typus**: b/c cultura exsiccata, MFC-5A032.
DESCR In b/c: Conidiomata pycnidioidea, superficialia vel semi-immersa, solitaria vel gregaria, subglobosa ad hemisphaerica, 130-250 µm in diam., peridio prosenchymatosa, initio clausa postea late dehiscentia, postremo platelliformia, exposita stromate fertili; stromata prosenchymatosa, ex hyphis intertextis subhyalinis ad pallide brunneis, asperis, 1.0-2.5 µm latis constantia. Conidiophora deficientia vel ubi praesentia breviter cylindrica. Cellulae conidiogenae directe ex cellulis stromatis oriundae vel in conidiophoris terminaliter integratae, dense contiguae, cylindricae, 12.5-25 µm longae, infra parte sterili 2.0-2.5 µm latae, supra parte fertili praecipue annellatae vel interdum sympodialiter elongatae 1.5-2.0 µm latae, hyalinae. Paraphyses (hyphae steriles erectae) cellulis conidiogenis mixtae, filiformes rectae laeves hyalinae 1.0-1.5 µm latae. Conidia cylindrca, apice rotundata, (1-)3-eusptata, (12.5-)15-20(-25) x (4.5-)5.0-6.0 µm, basi truncata 1.5-2.0 µm lata, verruculosa, brunnea, atro-fusca mucosa in massa.
MEM Walker, J., Sutton, B. C., & Pascoe, I. G. 1992. Mycol. Res. **96**: 911-924. => *Kirramyces* gen. nov., *K. epicoccoides, K. eucalypti,* and *K. lilianiae*. ** The present species has some similarity to *Gloeocoryneum* Weindlmayr (1964). The latter genus doesn't have pycnidioid conidiomata.
ICO P716: conidiomata on b/c, x 40.
P717: a conidioma in section, b/c, x 400.
P718: conidiogenous cells, x 1000.
P719: conidia, x 1000.
P720: conidia, focused on the surface, x 1000.
P721: a young conidioma (originally closed, ruptured in slide preparation), CMA, x 400.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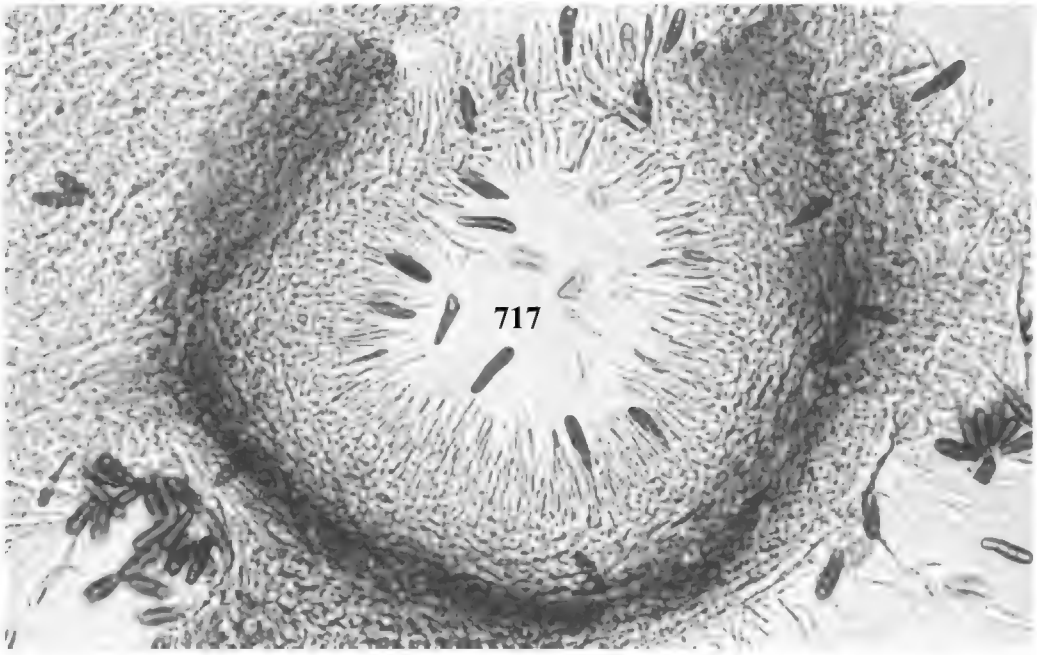
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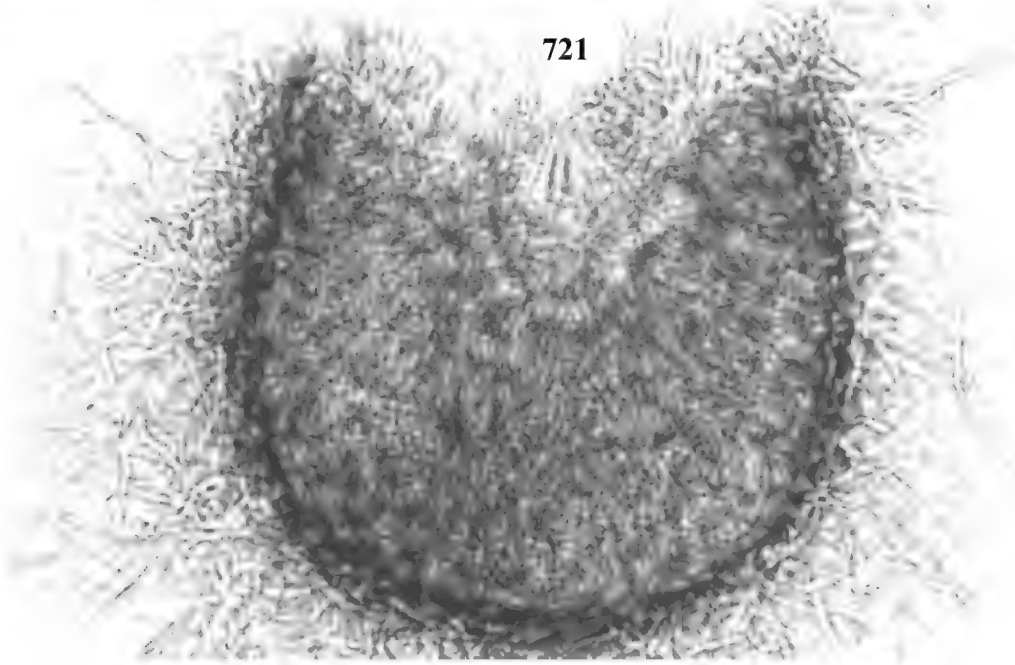
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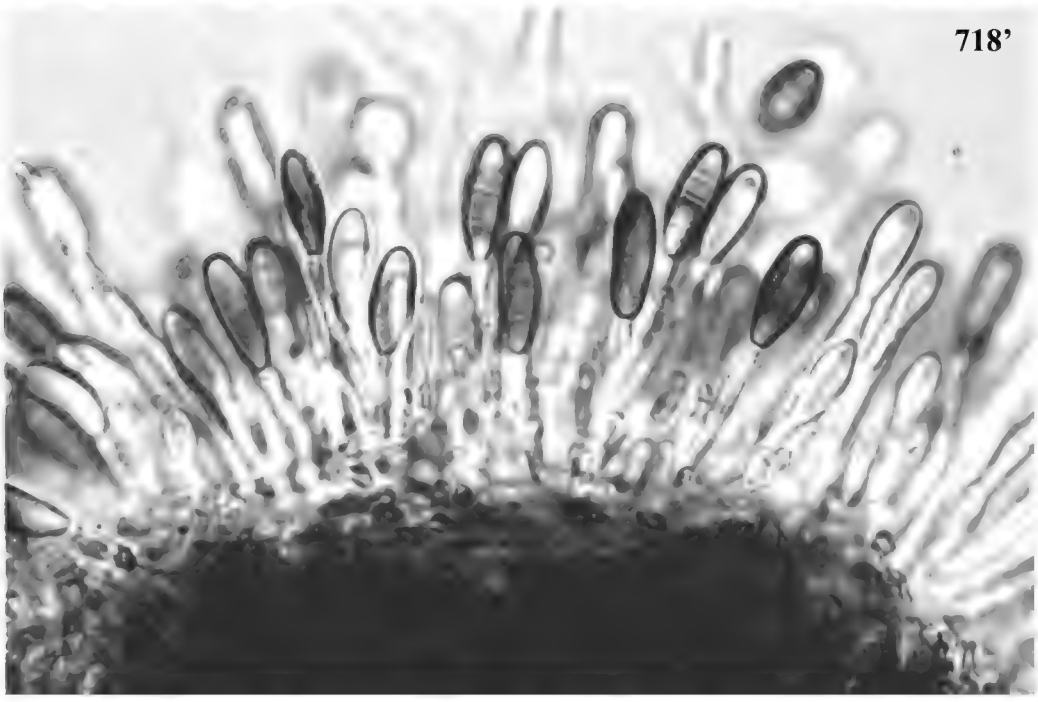

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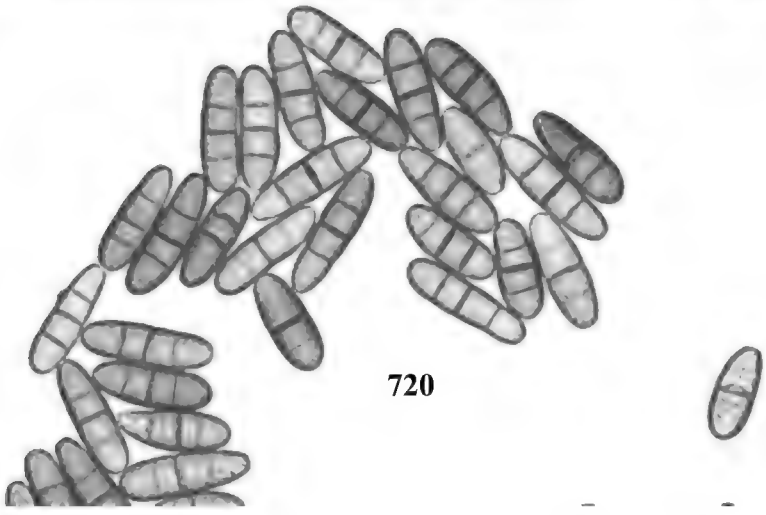

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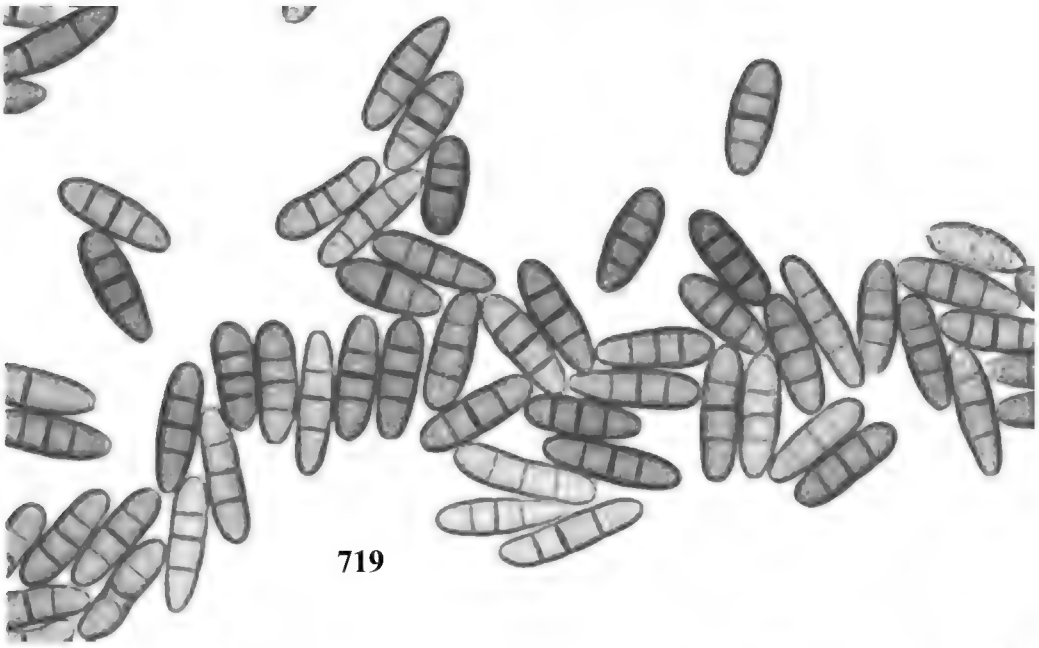

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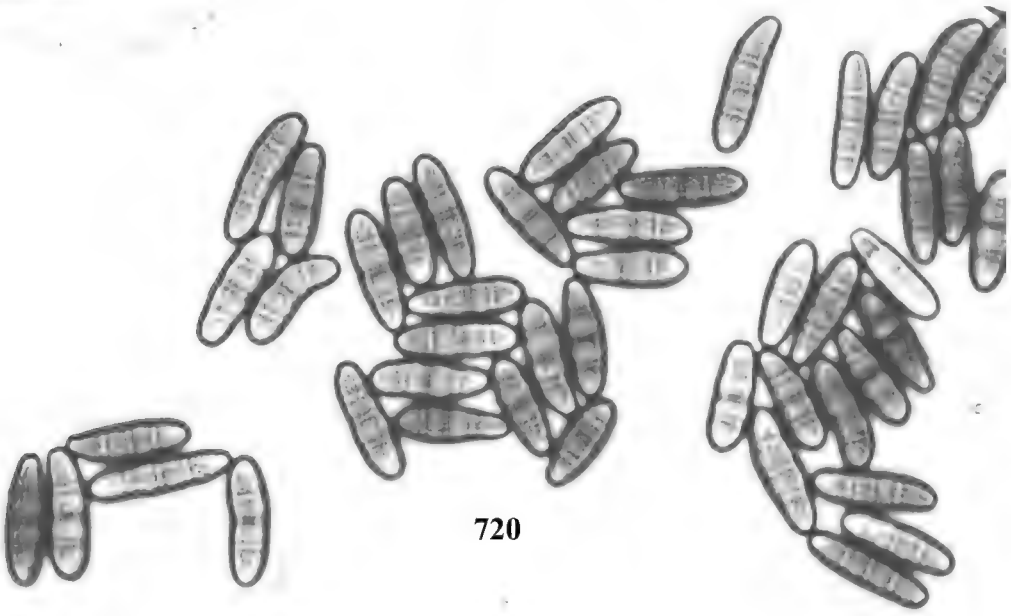

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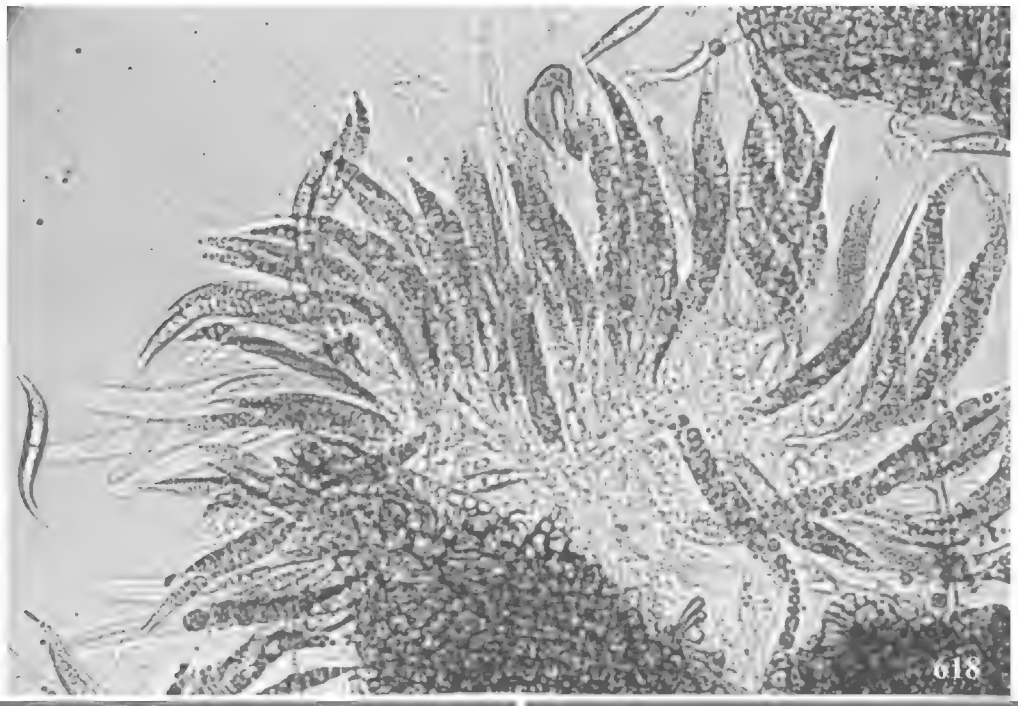
1280 ***Leiosphaerella malaysiana*** T. Matsushima sp. nov.
HAB In ramunculo putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: b/c cultura exsiccata, MFC-5T175.
DESCR In b/c: Colonia effusa, hyphis aeriis sparsis. Hyphis vegetativis ramosis, septatis, hyalinis ad fuscis, laevibus. Perithecia dispersa, solitaria vel gregaria, initio immersa, postea erumpentia, obpyriformia, ostiolata, non-setosa, atro-fusca, 150-250 µm in diam., 250-300 µm alta; peridium hyphis fuscis obtectum, 35-50 µm crassum, stratis extimis ex cellulis angularibus complanatis modice fuscis frequenter parte subcarbonaceis compositum, parte inferiore subhyalinum pseudoparenchymatosum. Asci fasciculati, cylindro-fusiformes, unitunicati, 110-140 µm longi, medio 10-12.5 µm lati, apice annulo, implicate 8-spori. Paraphyses deficientes. Ascosporae fusiformes, circa medium 1-septatae, ad septum constrictae, generatim curvae frequenter sigmoideae, ad apices sine appendicibus, 40-56 x 5-10 µm, hyalinae, exsudantes in massa mucosa lactanea. Ascosporae vetae interdum 3-septatae atque pallide brunneae. Anamorphosis ignota.
REF Mueller, E., & J. A. von Arx, 1962. Beitr. Kryptogamenflora der Schweiz **11**(2): 670-674. => *Lejosphaerella* v. Hoehnel (1919). ** Sivanesan, A., Shaw, D. E., & Brown, J. S. 1976. Trans. Br. mycol. Soc. **67**: 529-531. => *Leiosphaerella longispora* sp. nov. ** Samuels, G. J., & Rossman, A. Y. 1987. Mycotaxon **28**: 461-471. => *Leiosphaerella cocoes* and two new species of *Oxydothis* on palms.
ICO P611, P612: ascospores, x 1000 (phase contrast).
P618: asci from a squashed perithecium, b/c, x 400.
P619, P620: apical parts of asci (phase contrast), x 1000.
F855: ascospores, x 1000. (in p. 206)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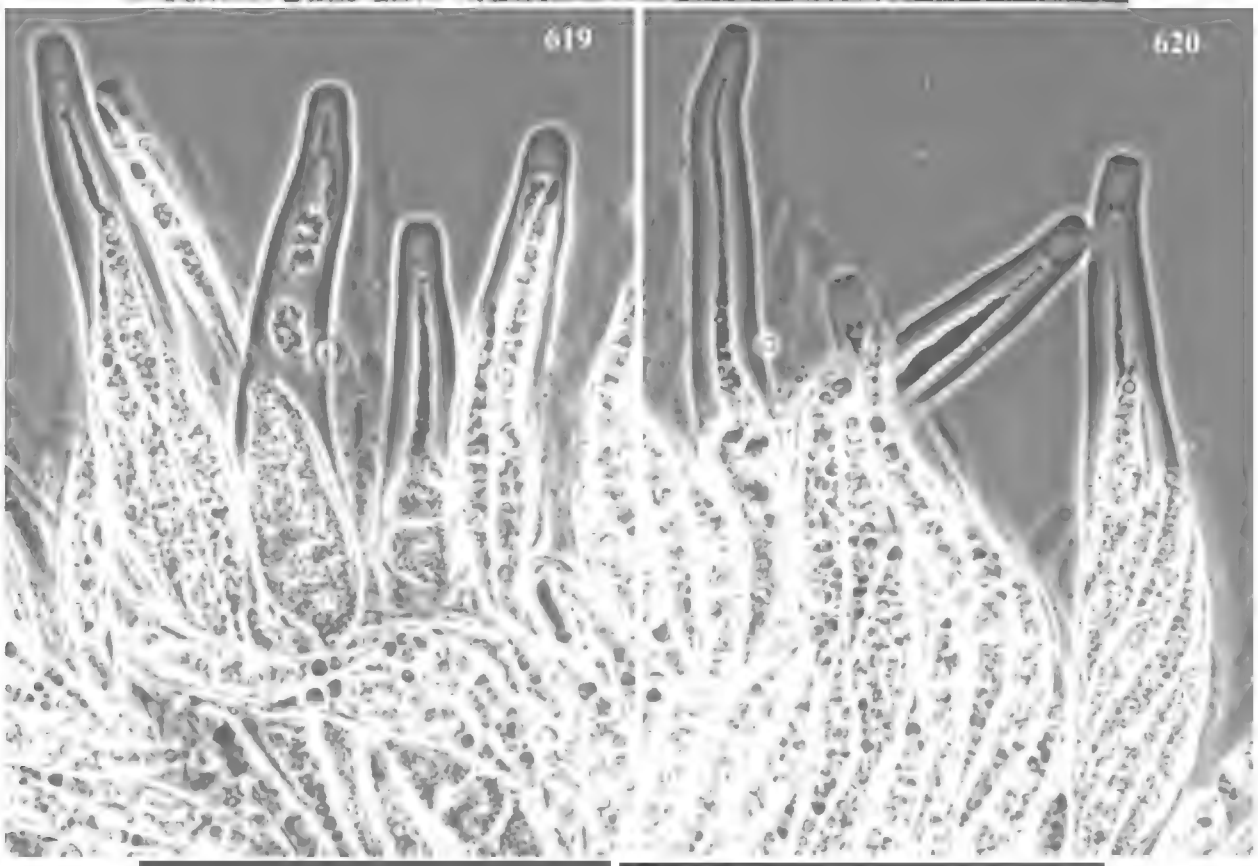
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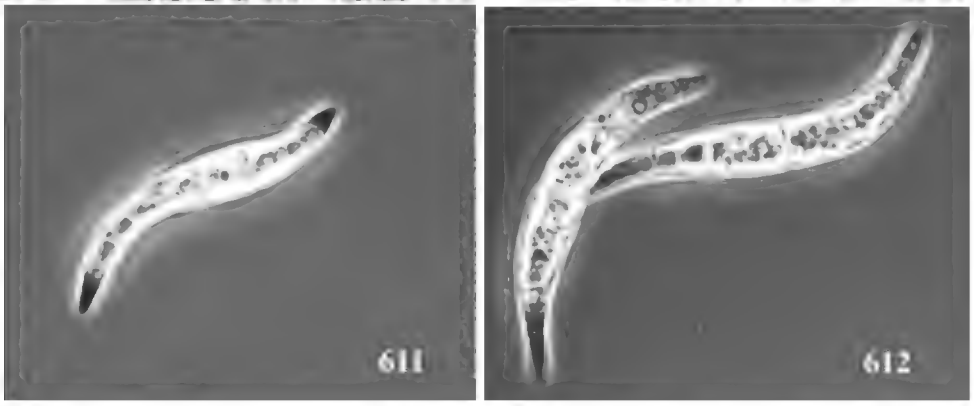
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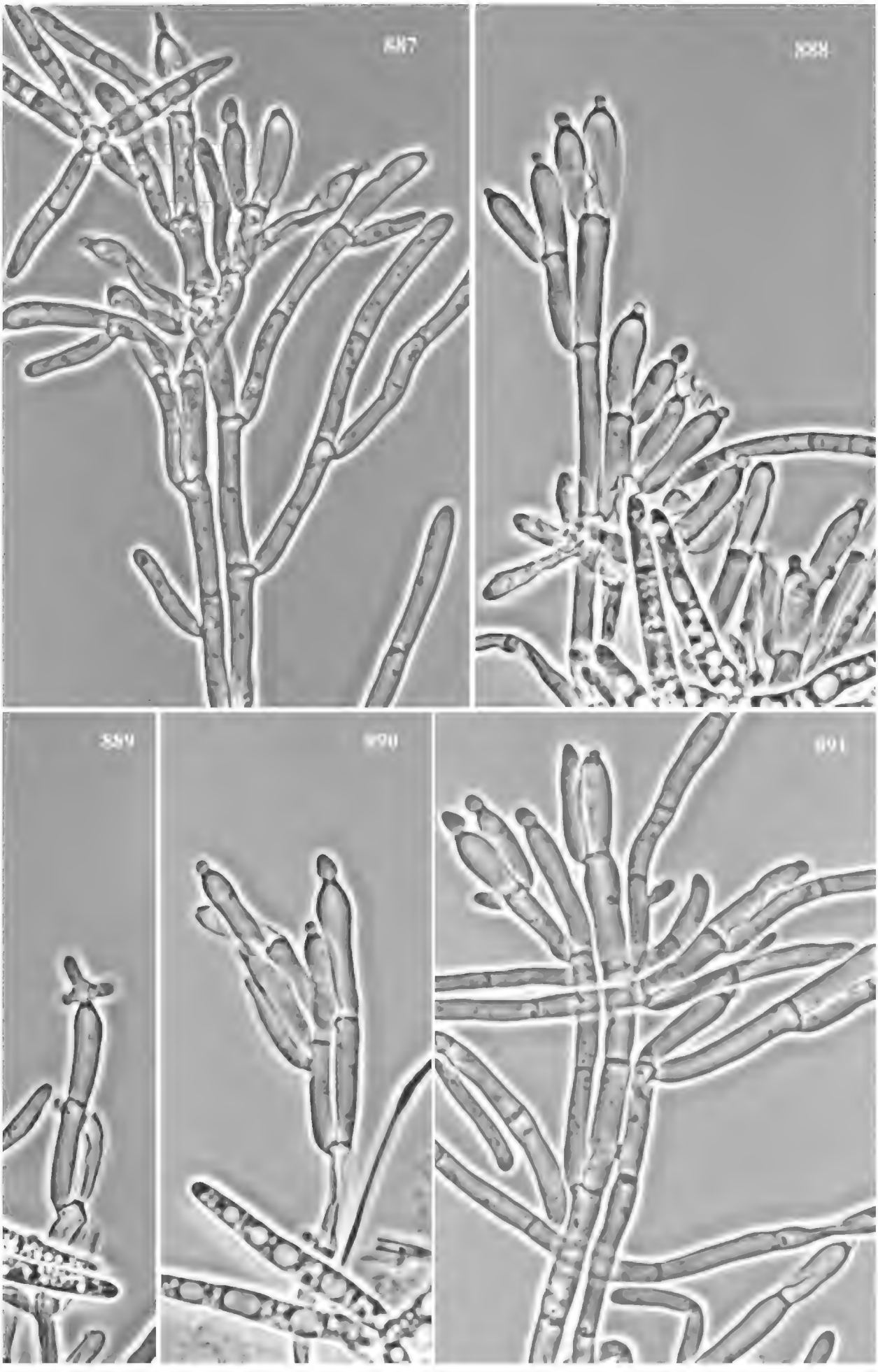
1281 ***Lemonniera filiformis*** Petersen, Mycologia **55**: 574, 1963.
HAB On a dead leaf of broad-leaved tree in stream; near Sparkling Water Hotel, near Rustenburg, South Africa; Sept. 21, 1995. MFC-5A123.
DESCR On CMA: Colonies thinly spreading, very pale brownish. Conidiophores macronematous, mononematous, usually appearing as scattered small whitish tufts, sometimes solitary, long, simple apically branched irregularly or more or less in appressed fashion; conidiogenous cells in mor or less parallel fascicles at th tip of conidiophore-branches, elongate, smooth, hyaline, enteroblastic-phialidic, determinate. The number of conidia formed in one conidiogenous cell is small. Conidia composed of a central septate narrowly obclavate stalk and 2-4, mainly 3, radiating narrowly obclavate branches at the basal cell of the stalk, smooth, hyaline; stalks narrowly obclavate, 35-85 µm long, 2-5-septate; bracnhes narrowly obclavate, 25-60 µm long, 1-4-septate. Conidiation occurs quickly in culture.
REF Petersen, R. H. 1963. Mycologias **55**: 570-581. ** Greathead, S. K. 1961. Jour. South African Bot. **27**: 195-229. Some aquatic Hyphomycetes in South Africa. ** Descals, E. & Webster, J. Trans. Br. mycol. Soc. **69**: 89-109. 1977. ** Descals, E., Pelaez, F., & Lopes Llorea, L. V. 1995. Nova Hedwigia **60**: 533-550.
ICO P887, P888, P889, P890, P891, P892 : conidiophores and conidiogenous cells, CMA, x 1000. (phase contrast)
P893: conidia, x 1000 (phase contrast).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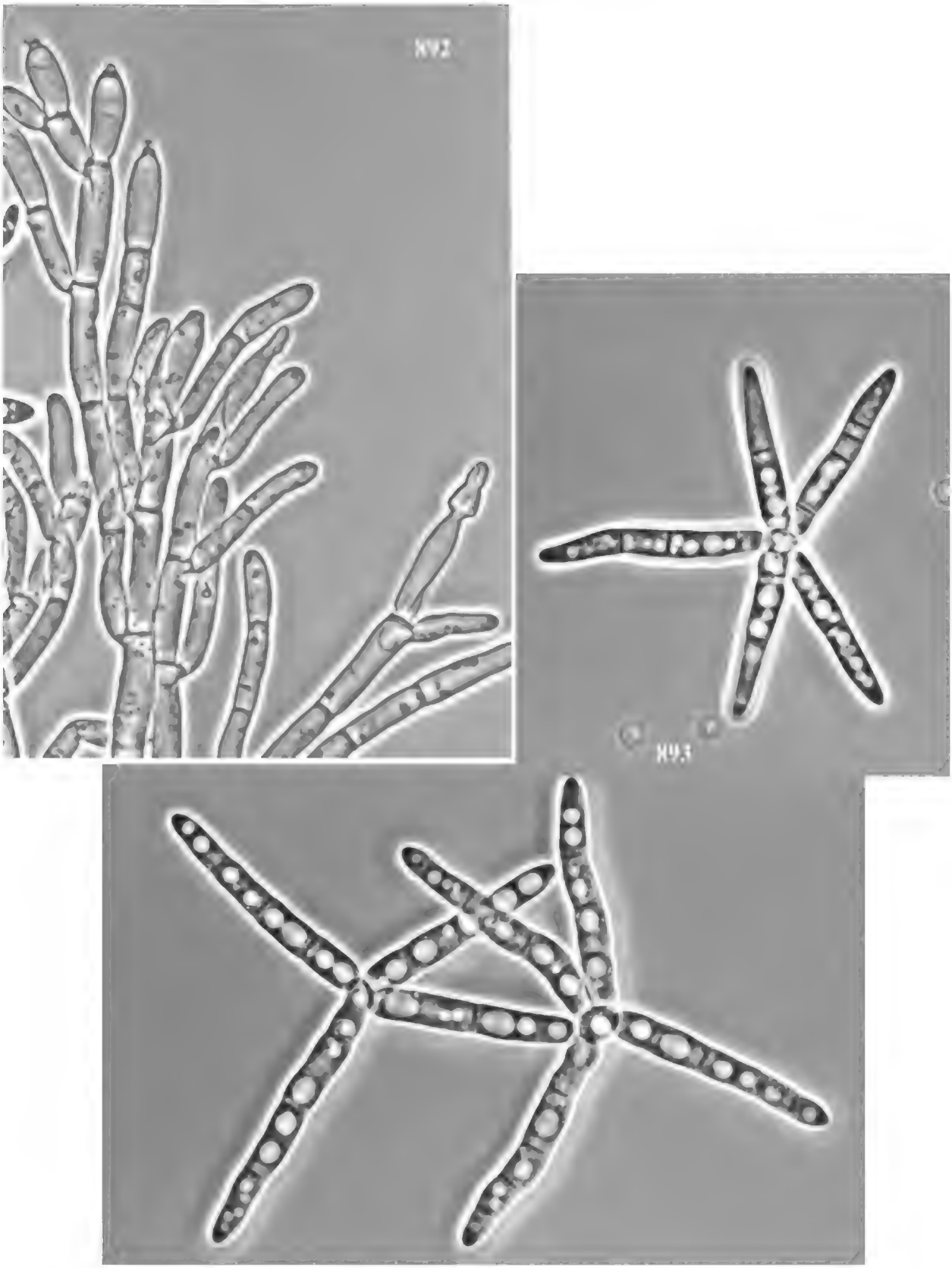
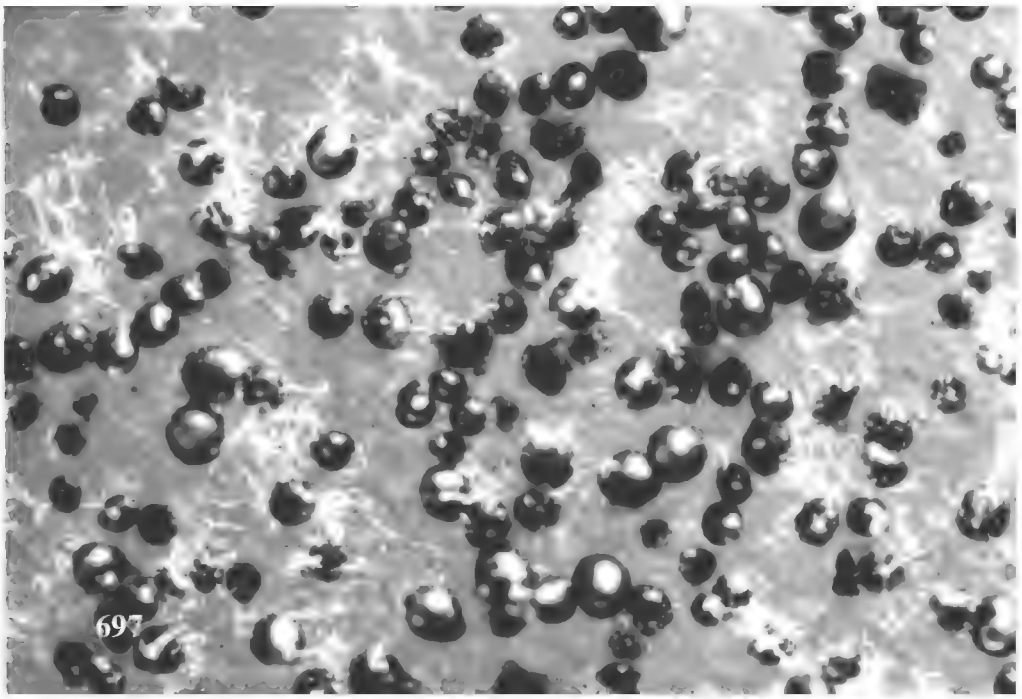

892
893

1282 ***Leptodiscella japonica*** T. Matsushima, in Icones Microfung. A Mats. Lectorum, 1975, p. 93.
HAB On a rotten twig in stream, Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-5A066.
DESCR On b/c & CMA: Conidia 1-septate, 10-14 x 3-4.5 μm, setulae 5-10 μm long.
MEM In the original description: the conidia 12-17 x 3.5-5 μm with setulae (6-)10-13 μm long. ** Mats. Myc. Mem. **2**, no. 283. 1981. => the conidia 12-16 x 3-4 μm with setulae of 8-12 μm long. From Alabama, U.S.A.

1283 ***Mastigosporella nyssae*** Nag Raj & DiCosmo, Bibliotheca Mycologica **80**: 57, 1981.
HAB In ramunculo mortuo arboris latifoliae; Tenkawa-mura, Nara Pref., Japan; May 1995. MFC-5H253.
DESCR On CMA: Colonies spreading, pale brownish, white aerial mycelia lightly developed in the central region. Pycnidia densely and evenly dispersed in and on the agar, solitary or gregarious. Pycnidia initially globose, closed, non-ostiolate, 75-150 μm in diam., later widely dehiscent, finally becoming cupulate, light brownish gray; peridium mambranaceous, pale brown, fragile, composed of about 3-layers of angular flattened cells; conidiogenous cells lining the inner surface of peridium, ovate to conicial, more or less angular, 4.5-7.0 x 3.0-5.0 μm, enteroblastic-phialidic with periclinal wall thickening or occasionally percurrent-polyphialidic with an elongating neck. Conidia blastogenous, continuous, boat-shaped, frequently unequal sided, occasionally curved, (12-)16-23 x 6-8.5 μm, narrowed and truncate at the base, 1.0-2.0 μm wide, with minute frill (remnant of conidiogenous cell), apically with a slenderly conical cellular appendage, which smooth, 1.5-14 μm long, hyaline, pale yellowish to pale orange mucous in mass. Conidiomata formation not good on b/c.
MEM Another species: *Mastigosporella hyalina* (Ell. & Everh.) Hoehnel, Sitzungsber. Kais. Akad. Wiss. Wien, Math.- Naturwiss. Kl. Abt. 1, **123**: 135. 1914. / = = *Harknessia hyalina* Ell. & Everhart, J. Mycol. **1**: 92. 1885.
REF Morgan-Jones, G. 1975. Mycotaxon **2**: 167-183. p. 176-178. => *M. hyalina*: described and illustrated. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I., p. 474. ** Morgan-Jones, G. 1977. Univ. Waterloo Biol. Ser. No. 17, p. 21-22. ** Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan. p. 474-477.
ICO P697: pycnidia on CMA, x 40.
P698: a near nature pycnidium (originally closed by ruptured by gentle pressure), CMA, x 200.
P699: pycnidium in surface view, x 1000.
P700: conidia, x 1000.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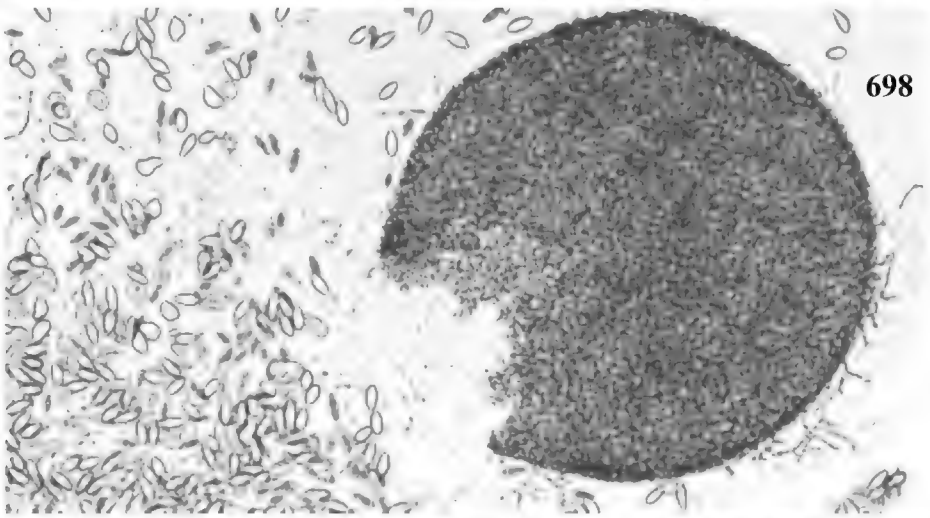
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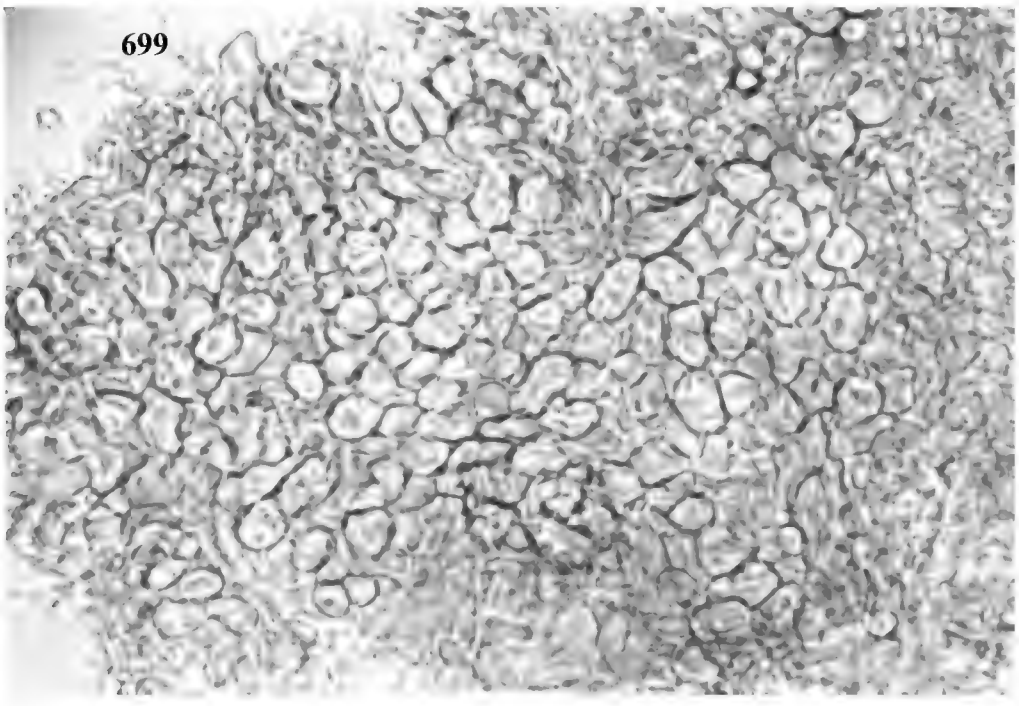
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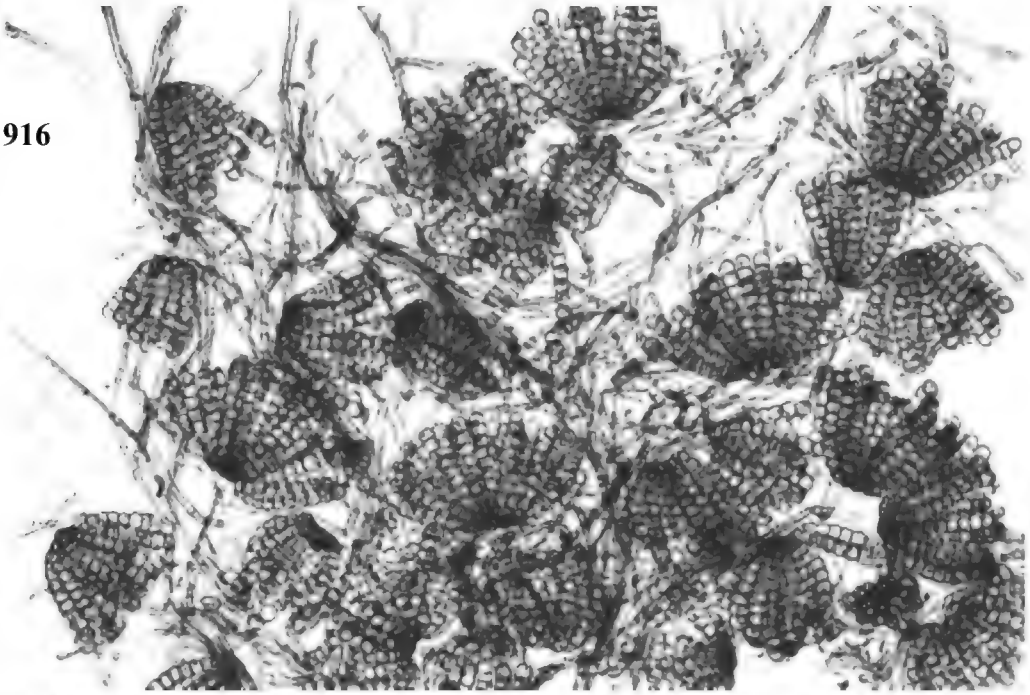
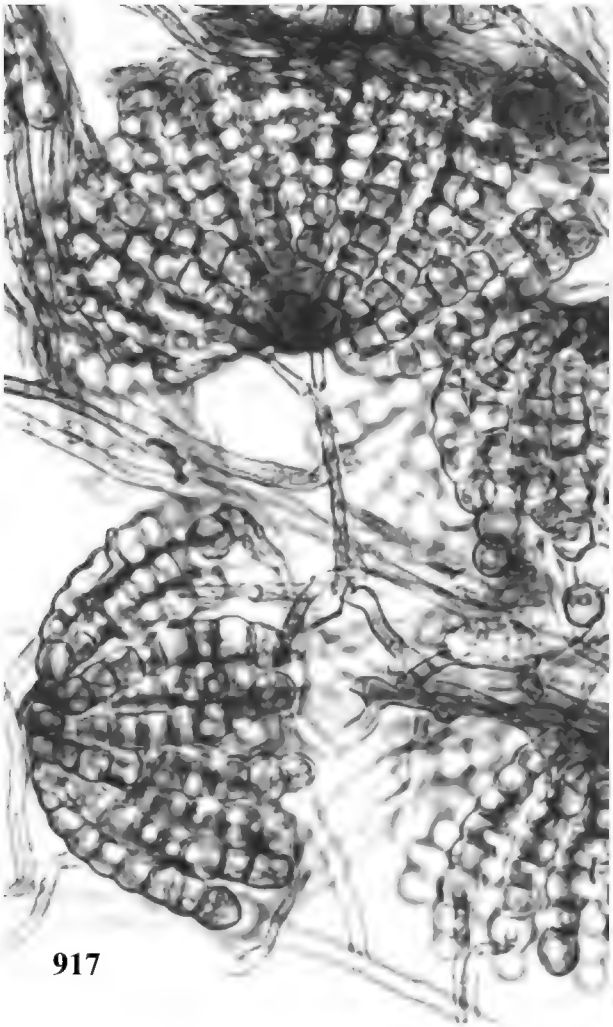
700

1284 ***Matsushimaea fasciculata*** (T. Matsushima) Subramanian, Kavaka **6**: 96-97. 1977.
= = *Torula fasciculata* T. Matsushima, in Icones Microfungorum A Matsushima Lectorum, p. 153-154, Pl. 61, 2 & Pl. 164, 5-6.
HAB Ex solo sylvae; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. MFC-6K027.
DESCR In b/c: Effusa, hyphis aeriis sparsis, olivacea. Hyphae vegetativae ramosae, septatae, 1.5-4.0 µm latae, laeves, pallide brunneae. Conidiophora deficientia. Conidia sessilia in hyphis vegetativis repentibus, aequaliter dispersa, solitaria vel aggregata, ambitu obconica ad cupulata 30-45 µm alta, ex cellula basali et ramis torulosis basi multo ramosis persistentibus constantia; rami cylindrici, septati, ad septa constricti, pallide brunnei, laeves; quaque cellula doliiformis, 3.5-6.0 µm in diam., 3.0-5.5 µm longa. Conidia ad maturitatem intacta, sicca, olivacea in massa.
MEM Castaneda Ruiz, R. F., J. Guarro, & J. Cano. 1996. Mycotaxon **57**: 467-469. => *Matsushimaea fertilis* Castaneda, Guarro, & Cano, sp. nov.
ICO P916: conidia in lateral view, on b/c, x 400.
P917, P918, P919, P920: the same, x 1000.
P921, P922: conidia, strogly pressed down apically to flattened state, x 1000.

916





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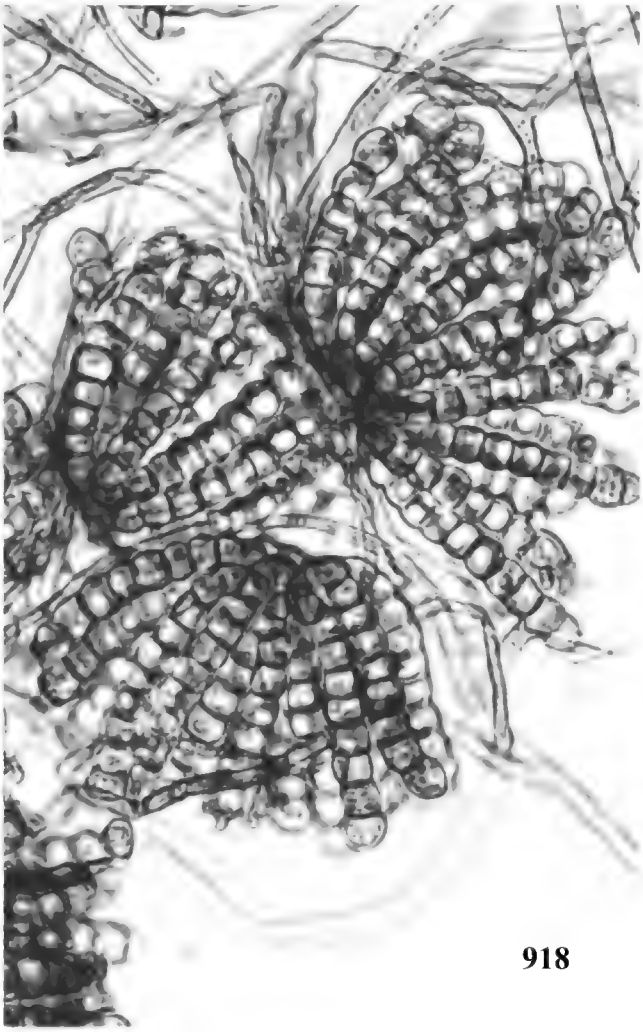

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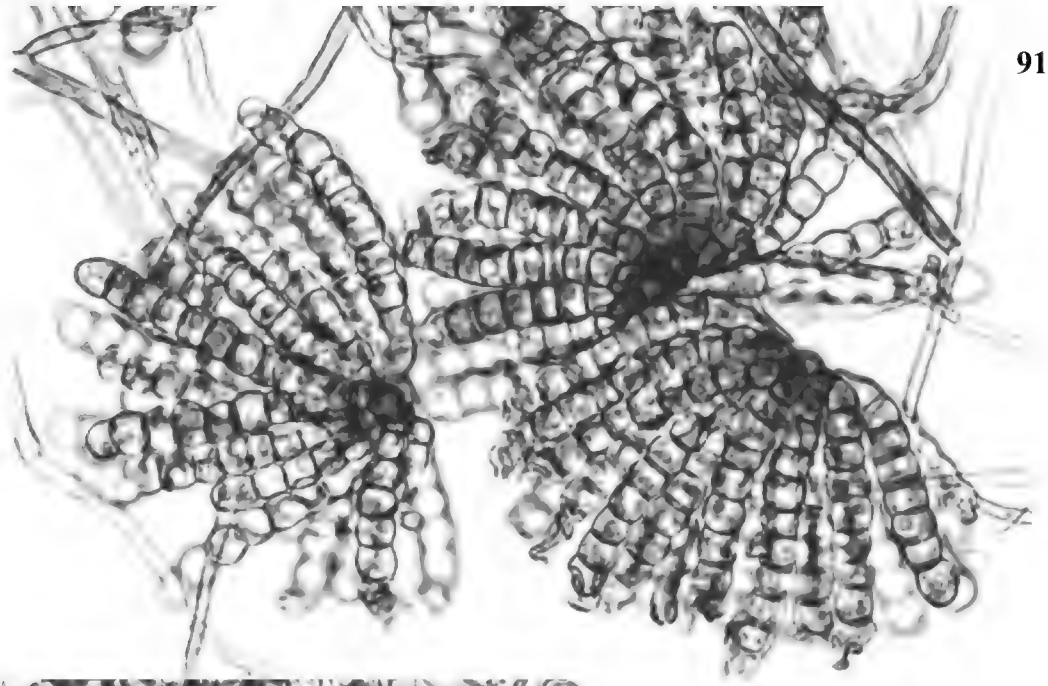

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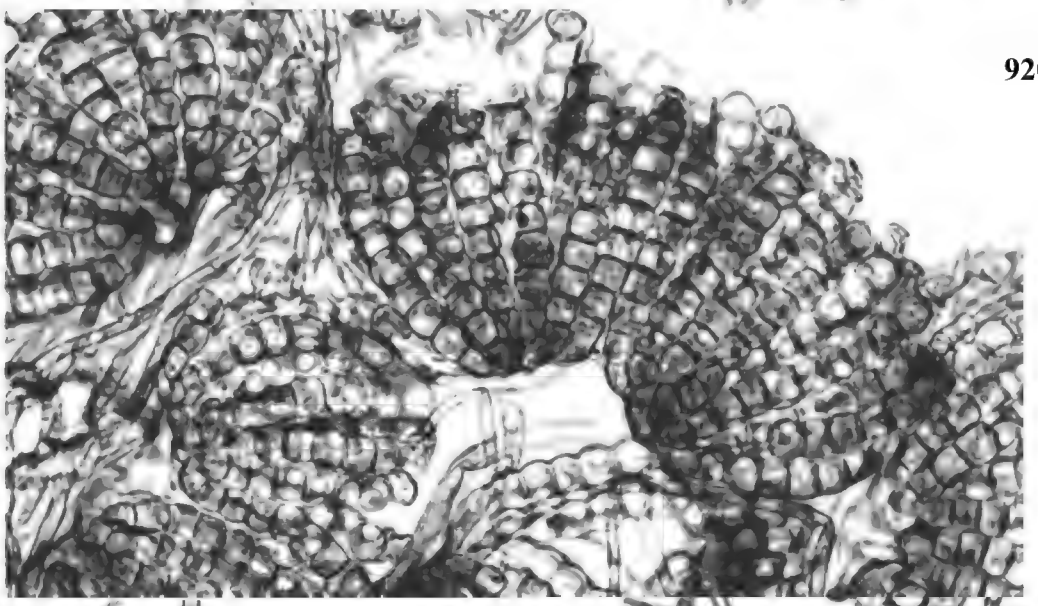

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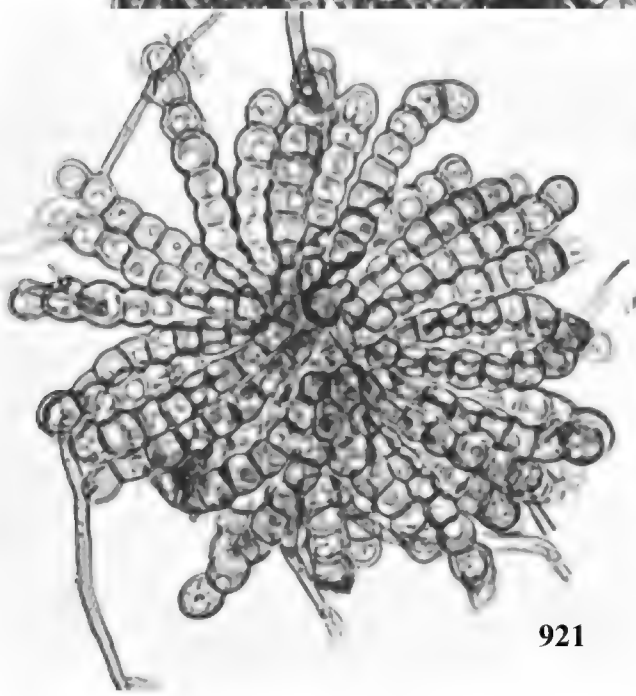

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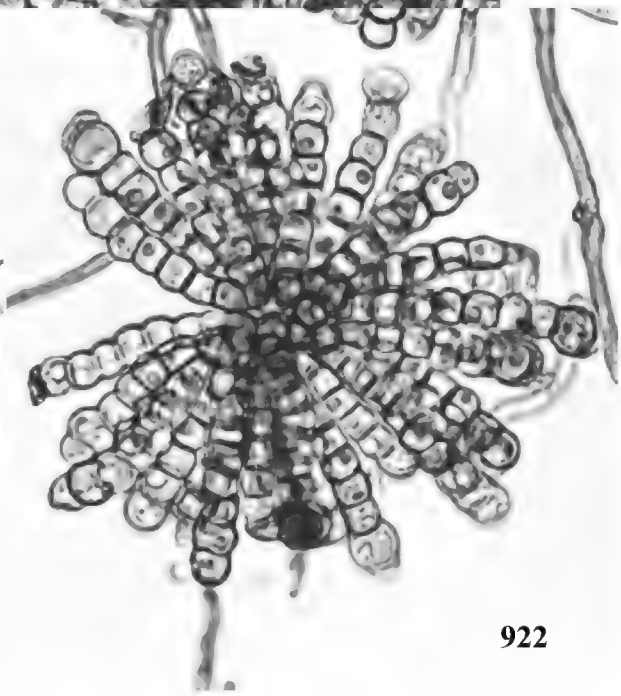
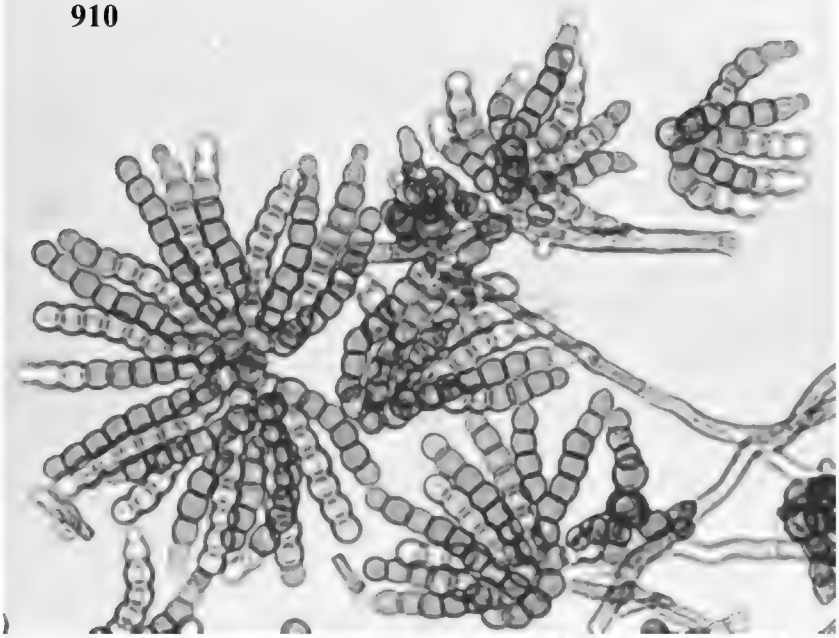


922

1285 ***Matsushimaea magna*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Darling, prope Cape Town, South Africa; Sept. 11, 1995.
Typus: b/c cultura exsiccata, MFC-5A012. **Etym.**: *magnus* = the conidia bigger than those of *Matsushimaea fasciculata*.
DESCR In b/c: Colonia effusa, olivacea ad brunnea. Hyphae vegetativae ramosae, septatae, 1.0-2.5 µm latae, laeves, pallide brunneae. Conidiophora mononematosa, micronematosa. Conidia sessilia in hyphis vegetativis repentibus, ex cellula basali et ramis torulosis basi multo ramosis constantia, altitudine variabilia usque ad 100 µm attingentia; rami cylindrici, septati, ad septa constricti, pallide brunnei, laeves; quaque cellula doliiformis, 3-4.5 µm in diam., 2.5-4 µm longa. Conidia ad maturitatem intacta, sicca, olivacea in massa. Synanamorphosis ignota. Teleomorphosis ignota.
In CMA: Colonia modice crescens, tenuiter coactae, olivacea ad brunnea.
ICO P910, P911, P912, P913, P915: conidia on b/c, x 1000.

910



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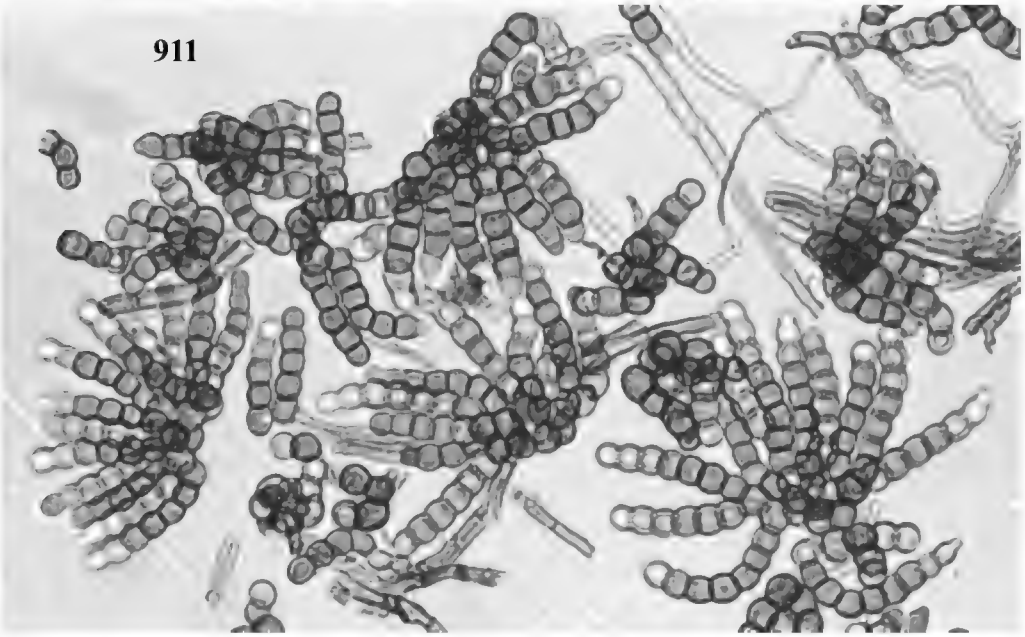

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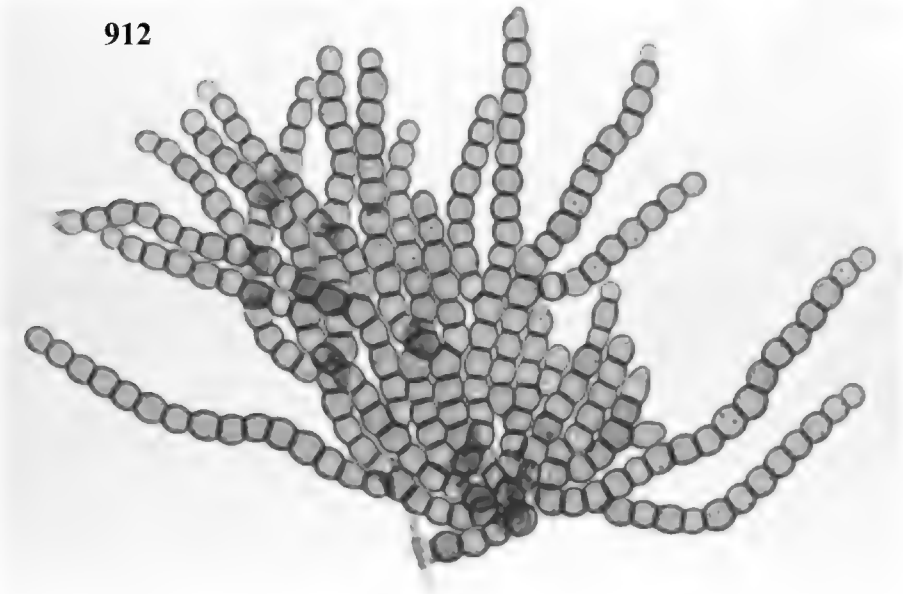

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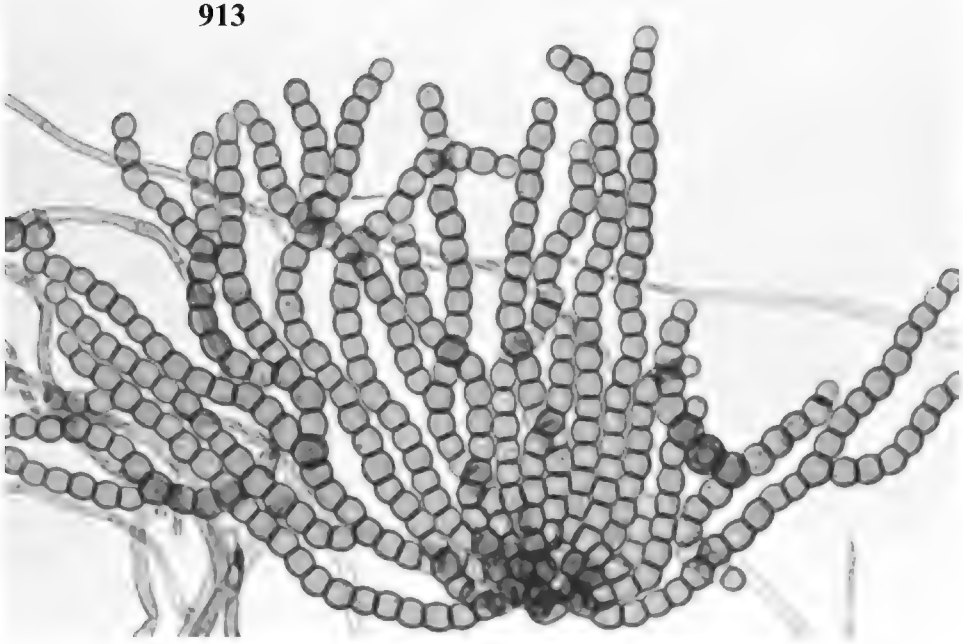

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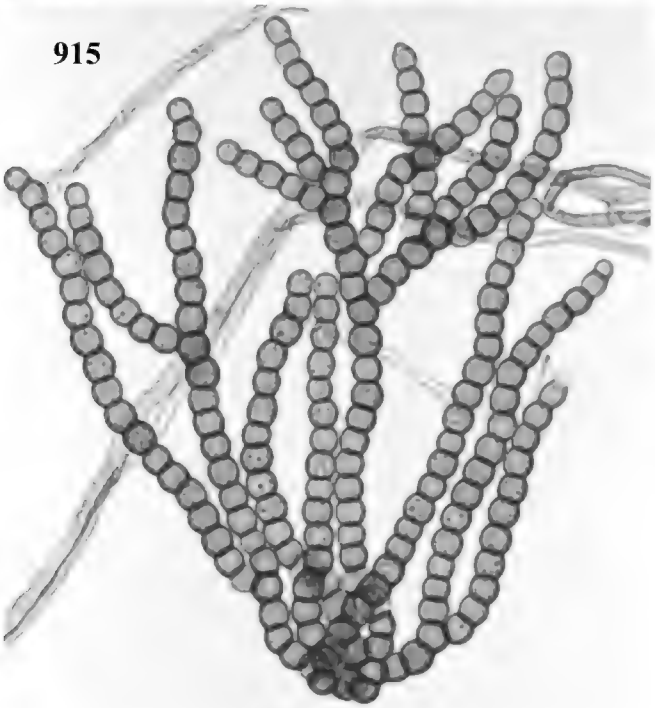

1286 ***Melanocephala triseptata*** (Shearer, Crane et Miller) Hughes, N. Z. Jour. Bot. **17**: 171-173. 1979.
= = *Endophragmiella triseptata* Shearer, Crane et Miller, Mycologia **68**: 184. 1976.
HAB On a rotten twig; Darling, South Africa; Sept. 11, 1995. MFC-5A015.
DESCR On CMA: Colonies growing very slowly, brownish gray. Conidia broadly obovoid, 3-septate, 23.5-32.5 x 12.5-17.5 µm, smooth, very dark colored at maturity. Synanamorphosis: *Phialophora*. Conidia lunata vel interdum filiformia, 5-16 µm longa, 0.5-1.5 µm in parte crassissima, laevia, hyalina.
MEM Some species of *Endophragmiella* are known to have *Selenosporella* or *Verticicladiella* synanamorphosis.
REF Mats. Myc. Mem. **1**, no. 106, 1980. ** Morgan-Jones, G., Sinclair, R. C., & A. Eicker. 1983. Mycotaxon **17**: 301-316, p. 310-312. => *Melanocephala triseptata* described and illustrated, on dead leaves, South African. No mention about synanamorphosis. ** Mats. Myc. Mem. **7**, no. 911. 1993.
ICO P815, P816, P817: conidia, on CMA, x 1000.
P818: conidia of *Phialophora*-synanamorphosis, x 1000.
F869: conidiogenous cells of *Phialophora*-synanamorphosis, on CMA, x 1000. (in p. 209)

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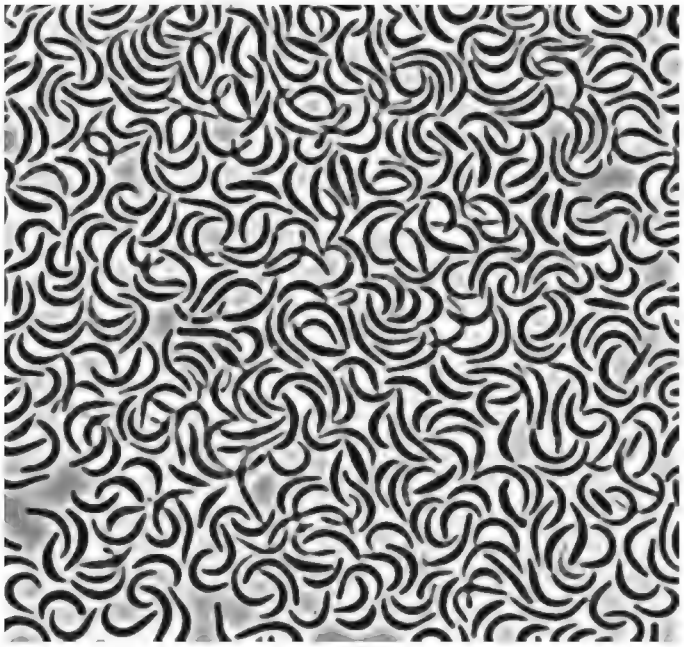
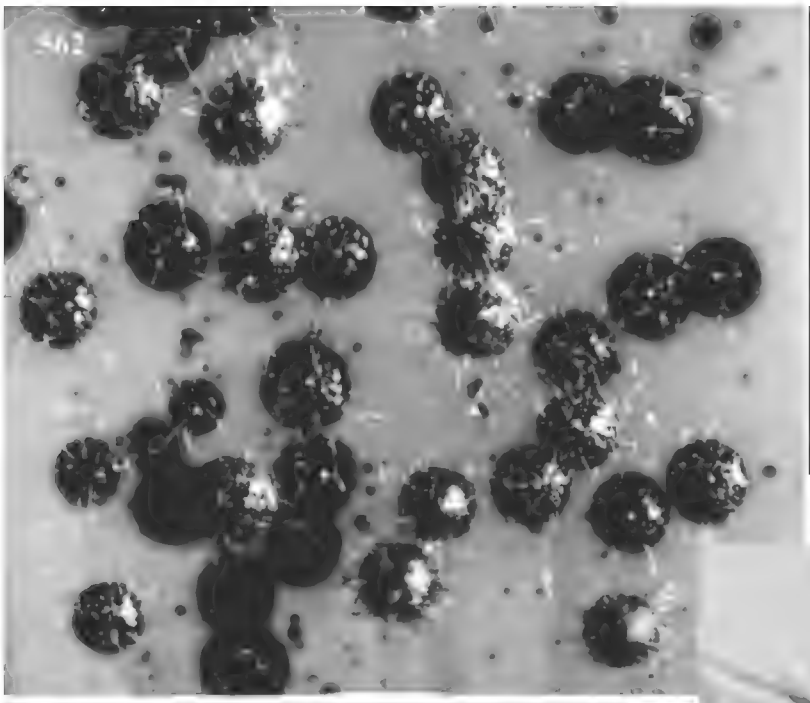


818

1287 ***Microascus microcordiformis*** T. Matsushima sp. nov.
HAB Ex solo; Pella Mission Station, South Africa; Sept. 9, 1995. **Typus**: CMA cultura exsiccata, MFC-6K057. **Etym.**: *micro-cordiformis* = ascospores small and heart-shaped.
DESCR Ex affinitate *M. longirostris*, collis ascomatum brevissimis atque ascosporis parivioribus distinctus.

In CMA: Colonia tarde crescens, fere immersa, pallide brunneola, postea ascomatibus ateris frequenter plus minusve annulis concentricis dense dispersis. Hyphis vegetativis hyalinis, non-propiis. Ascomata solitaria vel aggregata, tardissime matura (per duos menses vel plus), semi-immersa vel interdum immersa, globosa,160-320 µm in diam., collo parvo ostiolato, 25-35 µm longo, 30-35 µm lato, sine setis ad ostiolum; peridium textura angulari aspectu superficiali, statu juveni pallide brunneum, statu maturo carbonaceum tenax; setae ascomatis longae rigidae sursum angustatae, laeves, brunneae sursum pallidiores. Asci initio in catenis fasciculatis positi, statu maturo separati, plus minusve globosi, 6-7 µm in diam., 8-spori, evanescentes. Ascosporae unicellulares, cordatae 3.0-3.7 x 2.0-2.5 µm, oblongae aspectu laterali 2.0 µm latae, non-guttulatae, laeves, subhyalinae, pallide brunneae in massa; porus germinatione non confirmatus. Anamorphosis: *Scopulariopsis*. Conidiophora breviter ramosa, in fasciculis cellulae conidiogenae terminata; cellulae conidiogenae lageniformes apice collo annellato. Conidia doliiformia, 3-5 x 1.5-2(-2.5) µm, catenata, laevia, hyalina, pallide luteo-brunnea in massa.
MEM This new species is similar to *Microascus longirostris* Zukal (1885), but the latter species has long ascomatal necks of 100-200(-600) µm long and 20-30 µm wide, and conidia of *Scopulariopsis* 4-6 x 3-4 µm.
REF Barron, G. L., R. F. Cain, & J. C. Gilman. 1961. Can. J. Bot. **39**: 1609-1631 & 7 pls. => 14 spp. and one variety treated. ** Udagawa, S. 1962. J. Gen. Appl. Microbiol (Tokyo), **8**: 39-51. => 7 spp. listed. ** Morton, F. J., & G. Smith. 1963. Mycol. Pap. **86**: p. 25-27. => *M. longirostris* Zukal. ** Arx, J. A. von. 1975. Persoonia **8**: 191-197. ** Fungi Canadenses No. 180, 1980. => *Microascus longirostris*. ** Arx, J. A. von. 1988. Sordariaceous Ascomycetes without ascospore ejaculation. Beiheft 94 zur Nova Hedwigia. 104 pp. p. 37-43. => with a key to 11 spp. and one var.
ICO P562: perithecia on CMA, x 40.
P563: perithecium, x 200.
P564: asci, x 2000.
P565: ascospores (phase contrast), x 2000.
P566: conidia of *Scopulariopsis* - anamorphosis (phase contrast), x1000.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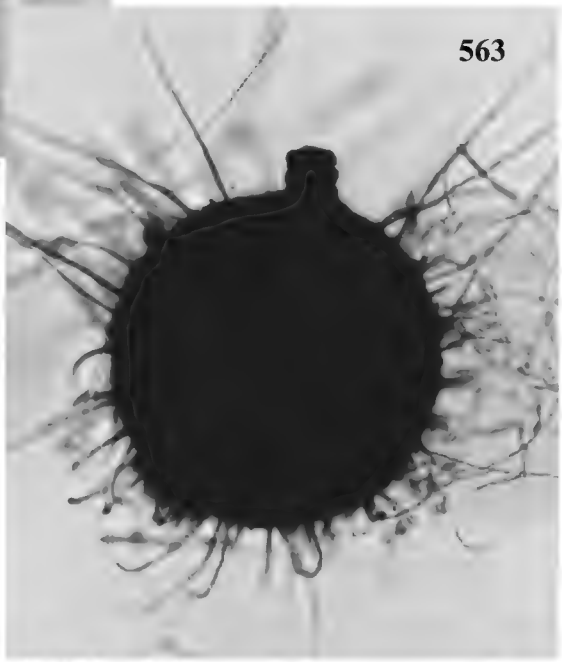
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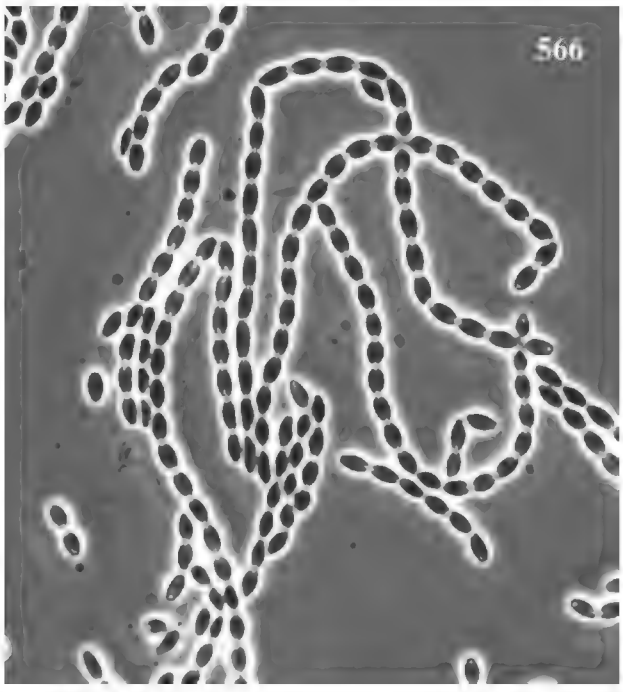
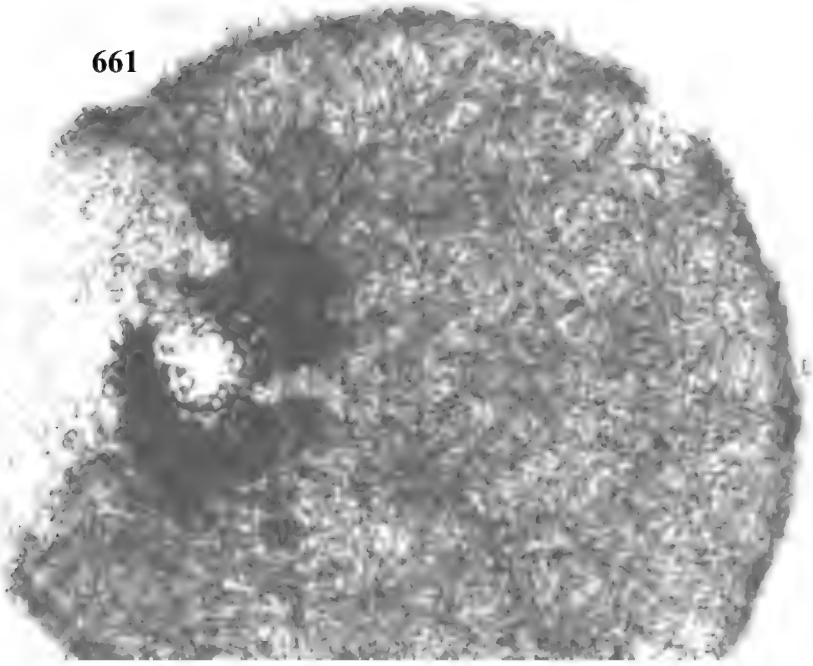

566

1288 ***Microsphaeropsis caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo sicco; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. **Typus**: b/c cultura exsiccata, MFC-5A258.
DESCR In b/c: Colonia effusa, fere immersa, hyphis aeriis sparsis. Pycnidia dispersa, superficialia, obpyriformia, ostiolata, atro-fusca (a conidia interna), globosa, 100-300 µm in diam., collo papilliformi ostiolato circum fuscato, hyphis hyalinis ad subhyalinis non propiis obtecta; peridium textura angulari aspectu superficiali, pallide brunneum, parte carbonaceum, parte interiore pseudoparenchymatosum, hyalinum ad subhyalinum. Conidiophora deficientia. Cellulae conidiogenae sunt cellulae peridii intimae, subangularia ad ampulliformes, 5-8 x 4-6 µm, hyalinae ad subhyalinae, apice truncatae 2.0-3.5 µm latae, enteroblasticae-phialidicae ore intrisecus incrassato, interdum percurrentes-polyphialidcae collo intrinsecus intermittenter incrassato. Conidia breviter cylindrica apice rotundata basi obstusa vel subtruncata, 5.0-7.0 x 2.5-3.0 µm, laevia, pallide fusca, atro-fusca mucosa in massa.
MEM *Coniothyrium - Microsphaeropsis* relationship was discussed by Sutton (Mycol. Pap. **123**, 1971 and The Coelomycetes, C.M.I., 1980). Clear distinction still seems to be hard frequently.
REF Saccardo, Sylloge fungorum **3**, 1884. ** Grove, W. B. 1937. British stem- and leaf-fungi. II. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I., Kew.
ICO P661: a pycnidium in top view, gently squashed, on b/c, x 400.
P662: peridium in surface view, x 1000.
P663: conidia, x 1000.
P668: a pycnidium in lateral view, x 400.

661



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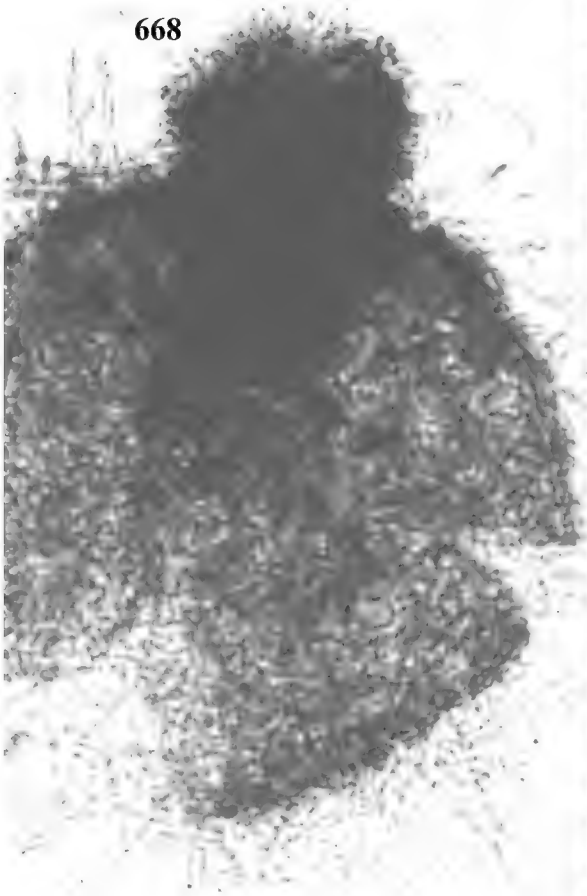

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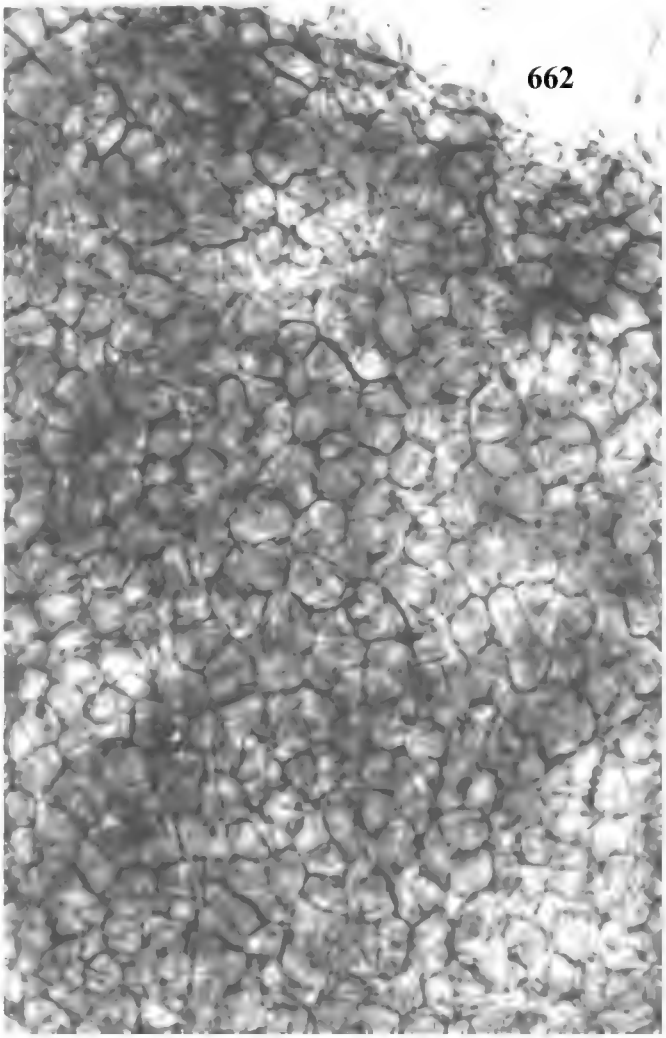
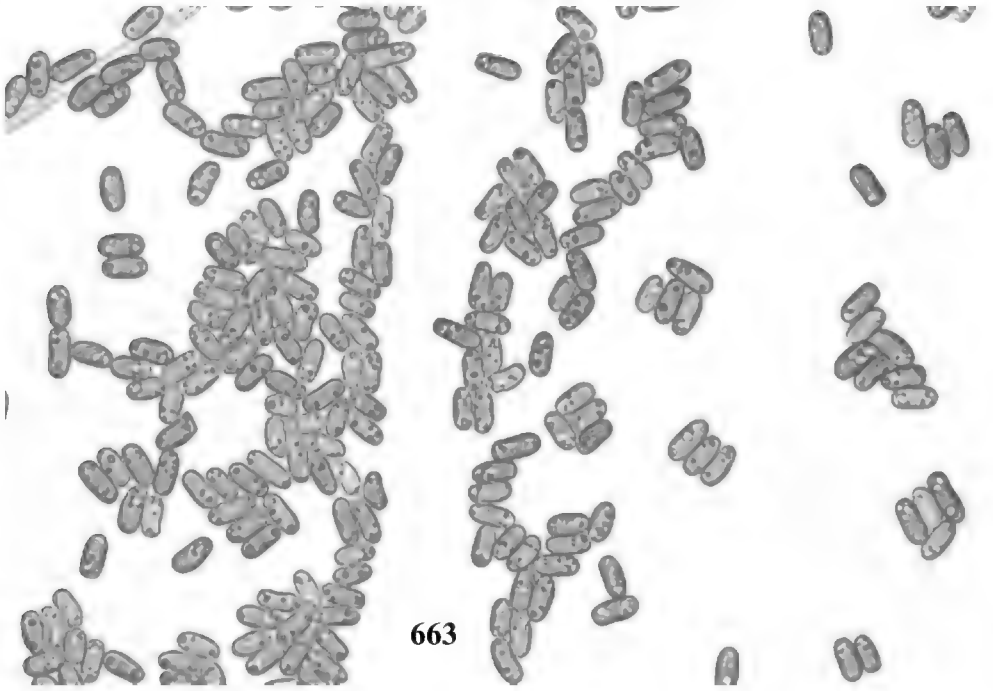
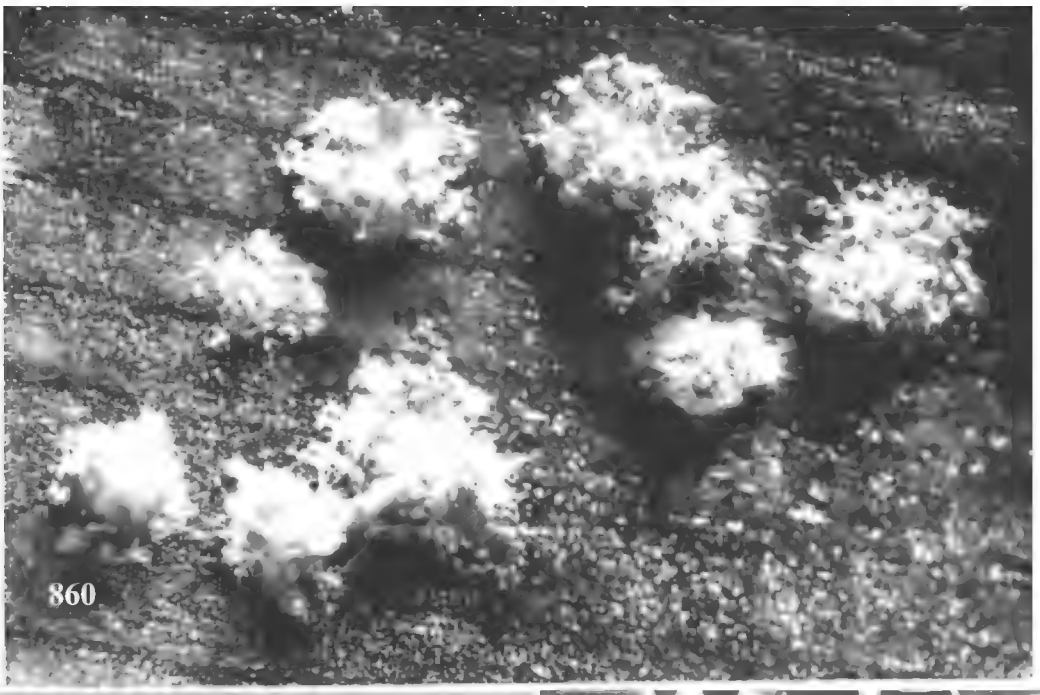




663

1289 ***Minimidochium microsporum*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Nabari City, Mie Pref., Japan; June 1995. **Typus**: b/c cultura exsiccata, MFC-5H264. **Etym**.: *microsporum* = small conidia.
DESCR In b/c: Colonia effusa. Sporodochia dispersa, solitaria vel gregaria, frequenter confluentia, pulvinata, sessilia, plus minusve immarginata; basi stromate prosenchymatoso pallidissime brunneo, setis paucis ferentia; setae simplices 150-300 µm longae, 4.0-5.5 µm latae, rigidae rectae, crassi-tunicate, atro-brunneae. Conidiophora ex stromate oriunda; dense contigua, cylindrica, inferne 2-3 µm lata, superne 1.5-2.5 µm lata, laevia; metulae cylindricae, 5-10 µm longae, 1.5-2.5 µm latae, laeves, apice 1-4 cellulis conidiogenis: cellulae conidiogenae cylindricae, apicem versus leviter angustatae, 5-17.5 µm longae, 1.5-2 µm latae, laeves, apice ca. 1 µm latae, enteroblasticae-phialidicae. Conidia lunata, utrinque unisetulata, continua, laevia, (3.0-)3.5-5.0 (-6.0) µm longa, 1.5-2.7 µm lalta, setulis 0.5-2.5 µm longis, setulis basalibus exogenis, lactanea mucosa in massa.

In CMA: Colonia tarde crescens, brunneo-alba, hyphis aeriis sparsis, regione centrali aspectu pulveraceo per sporodochiis, circumferentia lata immersa pallide roseola sterilis.
MEM Sutton, B. C. 1969. Can. J. Bot. **47**: 2095-2100. => *Minimidochium setosum* gen. et sp. nov.
ICO P860: sporodochia on b/c, x 40.
P861: a fragment of sporodochium, x 400.
P862: conidia, x 2000 (phase contrast).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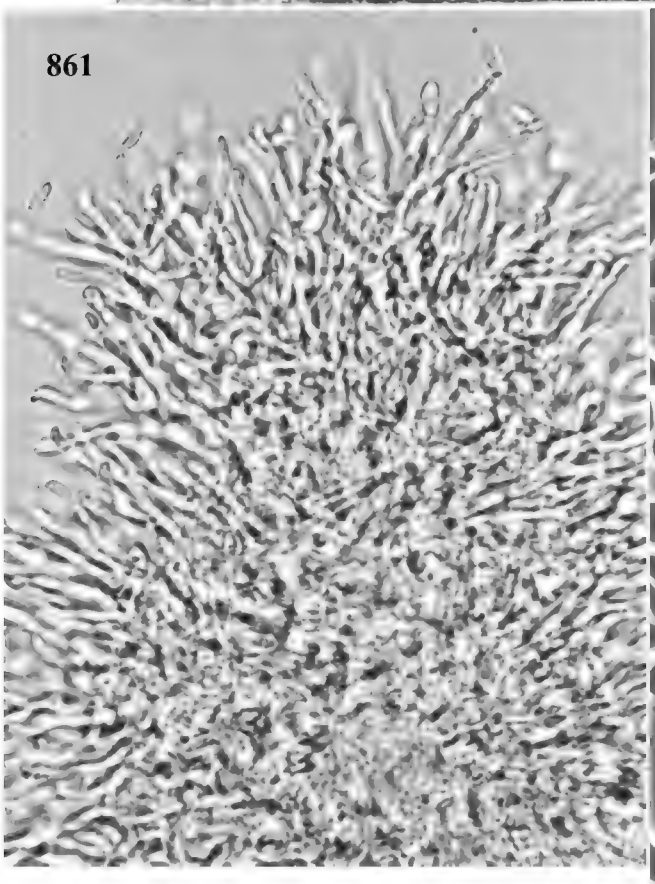
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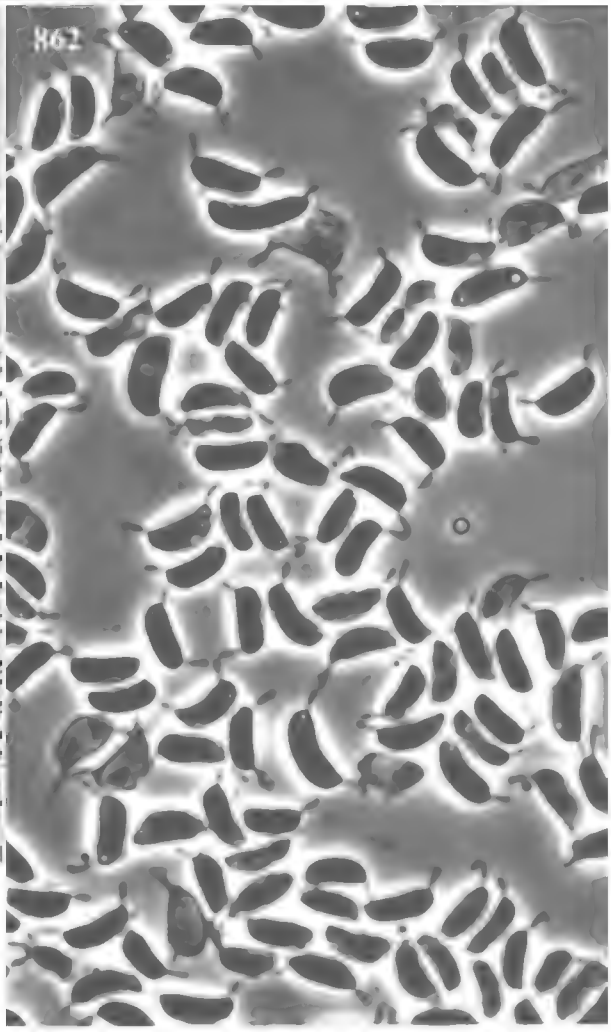
862

1290 ***Monochaetia caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo sicco denigrati fruticis spinosi; prope Vryburg (on the road side of National Route 14), South Africa; Sept. 8, 1995. **Typus**: b/c cultura exsiccata, MFC-5A228.
DESCR In b/c: Colonia effusa, hyphis aeriis sparsis, conidiomatibus dense dispersis. Conidiomata superficialia vel immersa, initio tholiformia, clausa, modice fusca, postea late dehiscentia cupulascentia; peridium parte exteriore ex cellulis pallide brunneis angularibus complanatis compositum, parte interiore pseudoparenchymatosum hyalinum. Conidiophora cellulis peridii intimis dense contigua, cylindrica, simplicia vel 1-2 plo ramosa, continua vel septata, laevia, subhyalina, interdum deficientia; cellulae conidiogenae in conidiophoris integratae vel discretae, interdum ex cellulis stromatis directe orientes, cylindricae 10-20 µm longae, 2.0-2.5 µm latae, laeves, hyalinae, apice annellatae. Conidia fusiformia, inaequilateralia vel leviter curva, 4-euseptata, 21-34 µm, praecipue 24-30 µm, 6.0-7.0 µm lata, 3 cellulis centralibus pallide brunneis 14-24 µm praecipue 16.5-21.5 µm longis; setula apicali subulata 7.0-10 µm longa, setula basali endogena subulata 1.0-7.0 µm longa; atera mucosa in massa.
REF Guba, E. F. 1961. Monograph of *Monochaetia* and *Pestalotia*. Harvard University Press, Cambridge, Mass. ** Sutton, B. C. 1980. The Coelomycetes, p. 267-273. ** Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan. p. 478-509.
ICO P738: conidiomata on b/c, x 40.
P739: a young conidioma (originally closed, but ruptured in slide preparation), x 200.
P740: conidiogenous cells and conidia, x 1000.
P741: conidia, x 1000.

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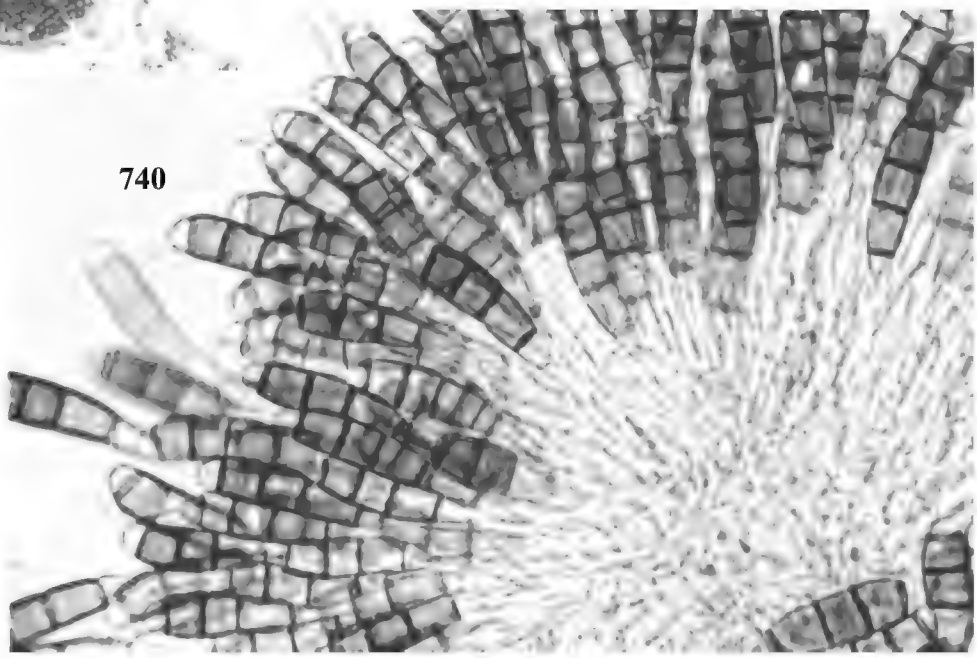

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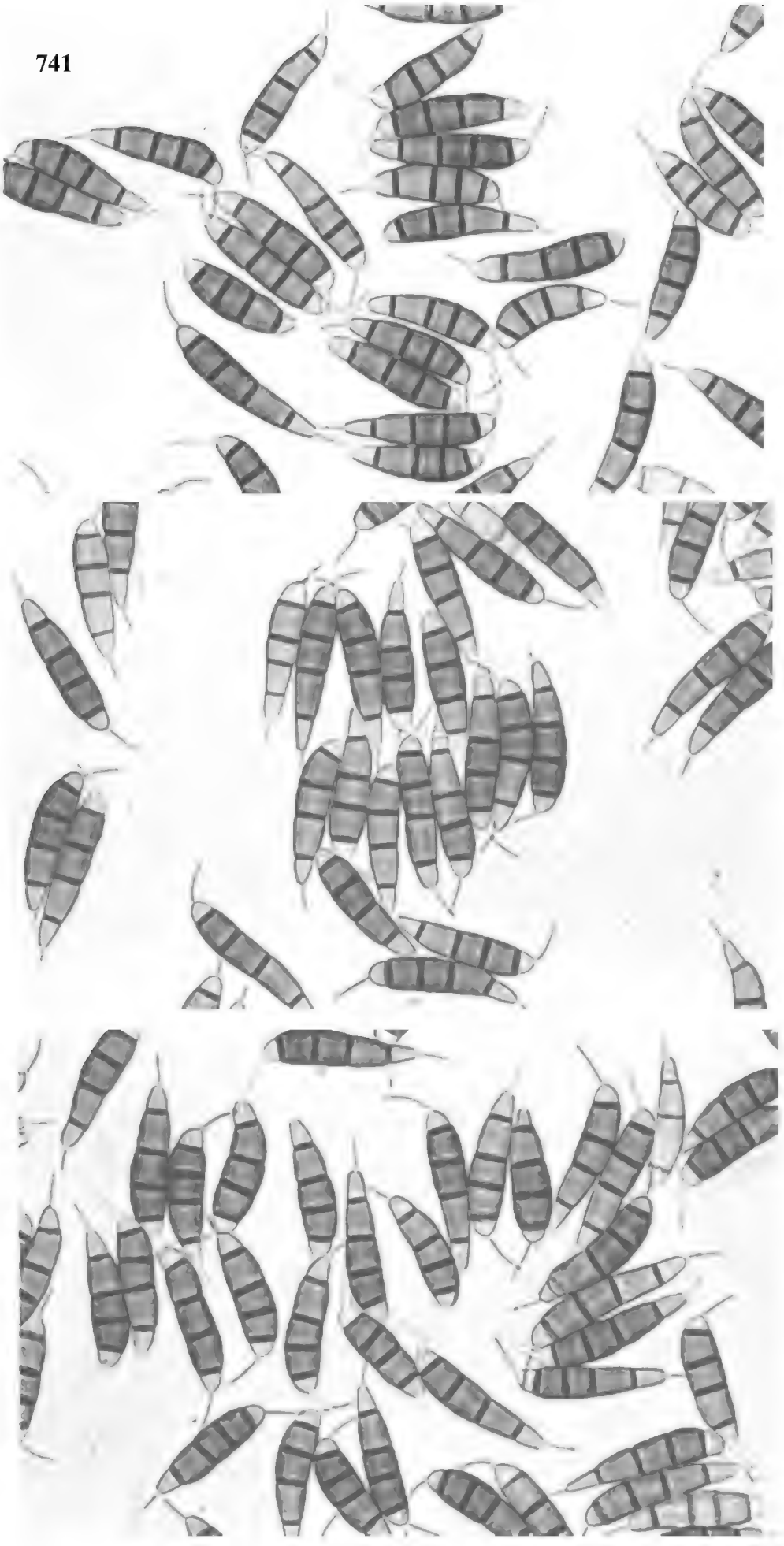
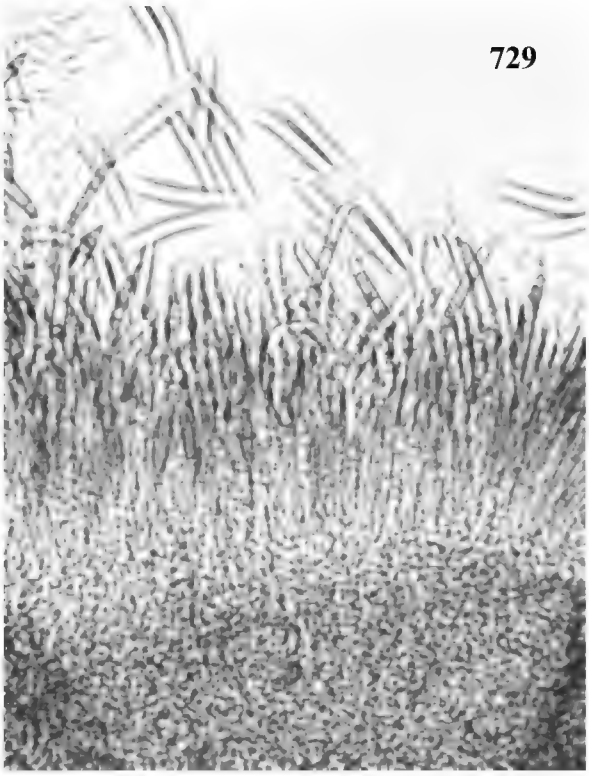


1291 ***Monochaetinula caffera*** T. Matsushima anam.- sp. nov.
HAB In folio mortuo *Perseae americanae* (avocado); Duiwelskloof, prope Tzaneen, South Africa; Sept. 27, 1995. **Typus**: b/c cultura exsiccata, MFC-5A240.
DESCR In b/c: Colonia effusa, hyphis aeriis albis ad pallide fuscis sparsis. Pycnidia dispersa, subepidermalia, praecipue tholiformia, postea erumpentia, late dehiscentia plus minusve platelliformia, atro-brunnea; peridium aspectu superficiali pallide brunneum textura angulari, parte interiore pseudoparenchymatosum subhyalinum. Paraphyses filiformes, septatae, 0.7-1.5 µm, laeves, hyalinae, cellulis conidiogenis mixtae. Conidiophora praecipue deficientia vel breviter cylindrica. Cellulae conidiogenae parte peridii interiore obtegentes, obclavatae ad cylindricae, 6-12 x 2.5-3.5 µm, apice collo brevi annellato hyalino. Conidia cylindro-fusiformia, leviter curva, laevia, 3-euseptata, 27-43 µm longa, 2 cellulis centralibus pallide brunneis 17.5-30 µm longis et 3.0-4.0(-5.0) µm latis, cellulis terminalibus hyalinis ad subhyalinis; setula apicali subulata 8-10 µm longa ca. 1 µm lata in parte inferiore, setula basali ubi praesenti endogena subulata 2.0-5.0 µm longa, prope basim 0.7-0.8 µm lata. Setulae basales nonnisi praesentes in statu perfecte maturo. Conidia cirrho longo modice brunneo vel massa mucosa modice brunnea cohaerentia.

In CMA: Colonia tenuiter effusa, pallide fusca, annulis concentricis fuscis, margine diffusa. Pycnidia dispersa in regione centrali, superficialia vel sub-immersa, atrobrunnea, subglobosa ad ovata, 140-240 µm diam., hyphis non-propiis hyalinis ad pallide brunneis leviter obtecta, ostiolata annulo pauci-elevato fusco, frequenter irregulariter refringentia cupulascentia.
REF Muthumary, J., Abbas, S. Q., & Sutton, B. C. 1986.Trans. Br. mycol. Soc. **87**: 103-108. A reassessment of *Monochaetia terminaliae*. ** Bianchinotti, M. V. Mycotaxon **59**: 455-459. 1990. => 2nd species: *M. geoffroeana* sp. nov. ** Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan, p. 515-524.
ICO P727: a young conidioma on CMA (originally closed, but ruptured in slide preparation), x 400.
P728: top view of a conidioma, gently squashed, showing an ostiole and wall surface, CMA, x 1000.
P729: fertile stroma, CMA, x 400.
P730: conidia, x 1000.

727



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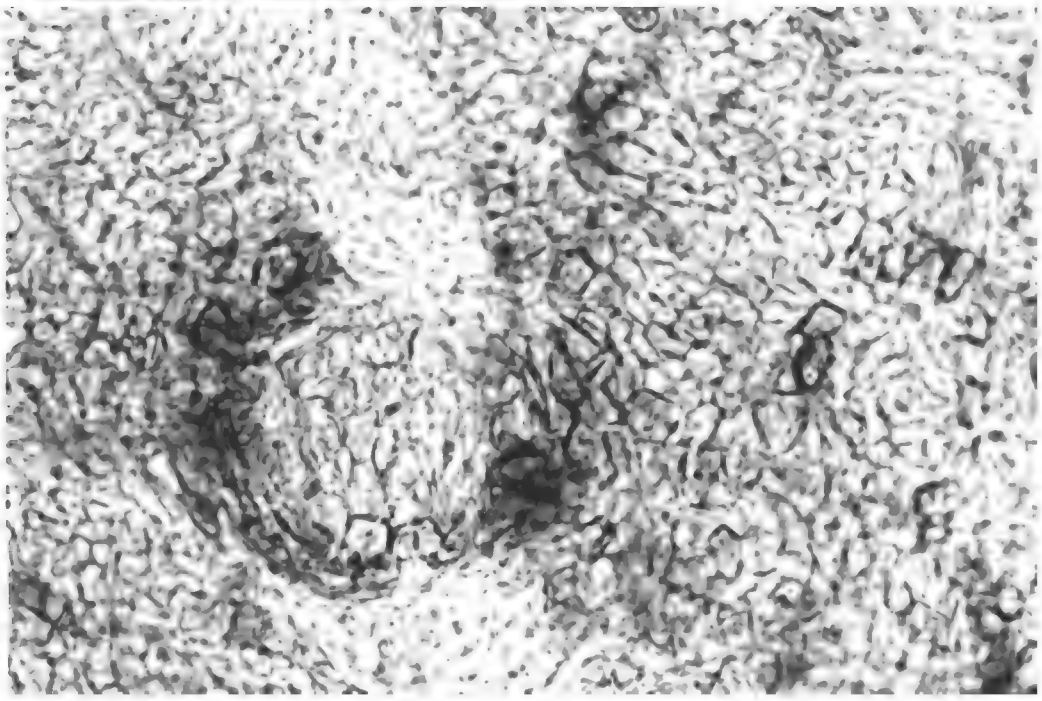

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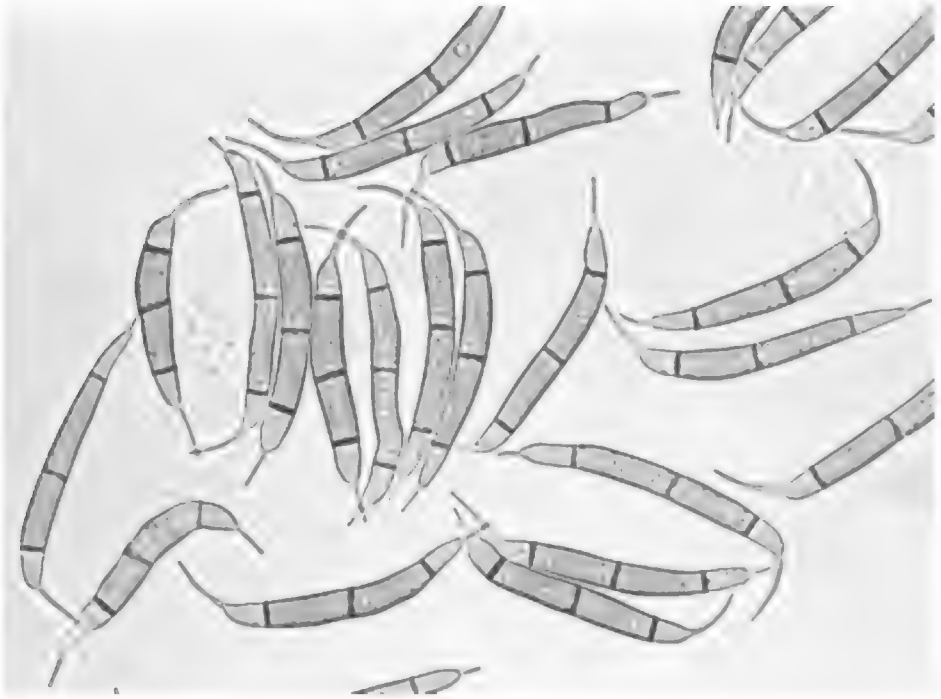

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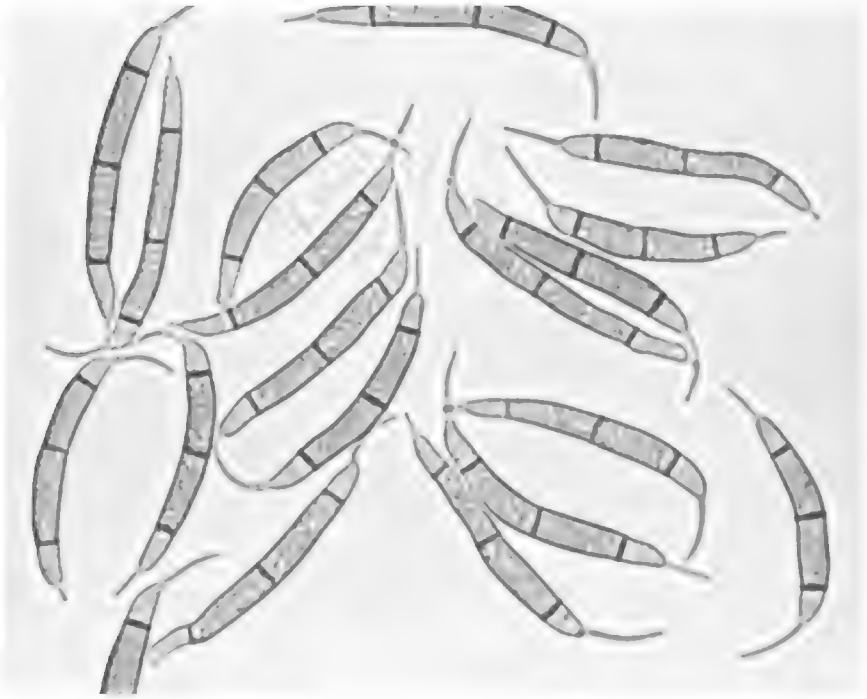


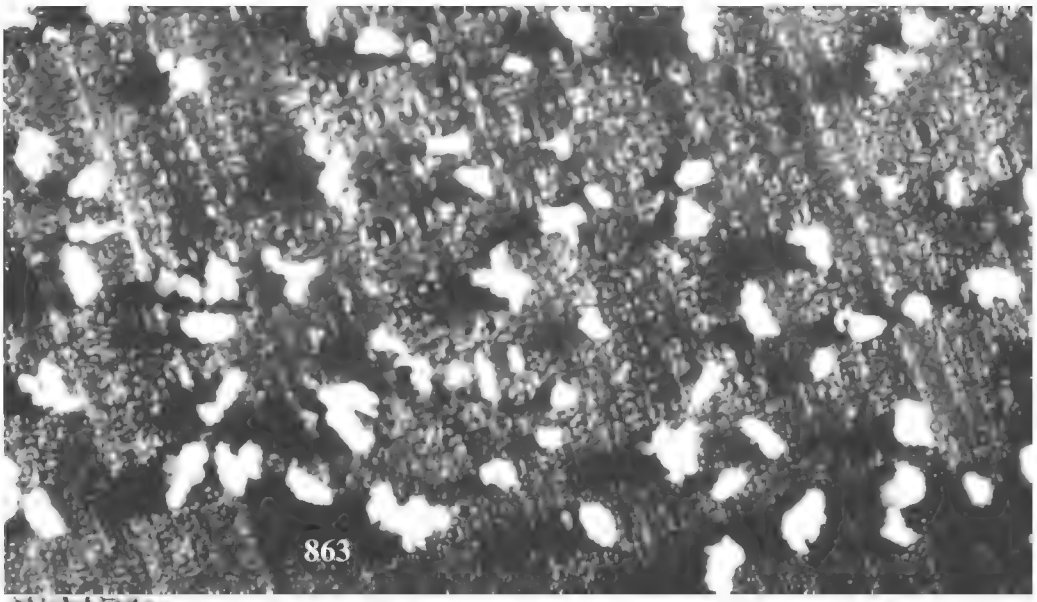
1292 ***Mycoleptodiscus terrestris*** (Gerdemann) Ostazeski, Mycologia **59**: 970. 1968.
= = *Leptodiscus terrestris* Gerdemann, Mycologia **45**: 553. 1993.

HAB On a decaying broad-leaved-tree leaf; Botanical Garden, University of Malaya, Kuala Lumpur, Malaysia; June 10, 1995. MFC-5T166.

DESCR On b/c: Colony spreading, with scant aerial hyphae, abundant pale yellowish sporodochia. Sporodochia superficial, plate-like, easily removed without damaging the substrate, more or less circular, solitary or gregarious, frequently confluent, one-cell layer thick, composed of individual conidiogenous cells arranged radially, subhyaline to pale fuscous. Conidiogenous cells irregular in shape, mostly poly-angular, 5-13 x 4-9 µm, with one circular inconspicuous opeing of 2-3 µm in diam., enteroblastic-phialidic. Conidia cylindrical, 1-septate, curved, 25-30 x 5.5-7 µm, truncate and 2-3 µm wide at the base, unisetulate at each end; setulae 15-25 µm longa, ca. 0.6 µm wide near the base, narrowing to ca. 0.3 µm, basal setulae exogenous; hyaline, pale orange mucous in mass, or collected into columns composed of coherent conidia.

REF Gerdemann, J. W. 1953. Mycologia **45**: 548-554. => *Leptodiscus terrestris* gen. et sp. nov. ** McVey, D. V., & J. W. Gerdemann. 1960. Mycologia **52**: 193-200. ** Agnihothrudu, V. 1964. Curr. Sci. **33**: 25-26. ** Ostazeski, S. C. 1967. Mycologia **59**: 970-975.

ICO P863: sporodochia on b/c, x 40.
P864: sporodochia (conidia washed away), x 400.
P865: sporodochium, in top view, circular apertures of conidiogenous cells seen, x 1000.
P866: the same, in bottom view, x 1000.
P867: conidia, x 1000.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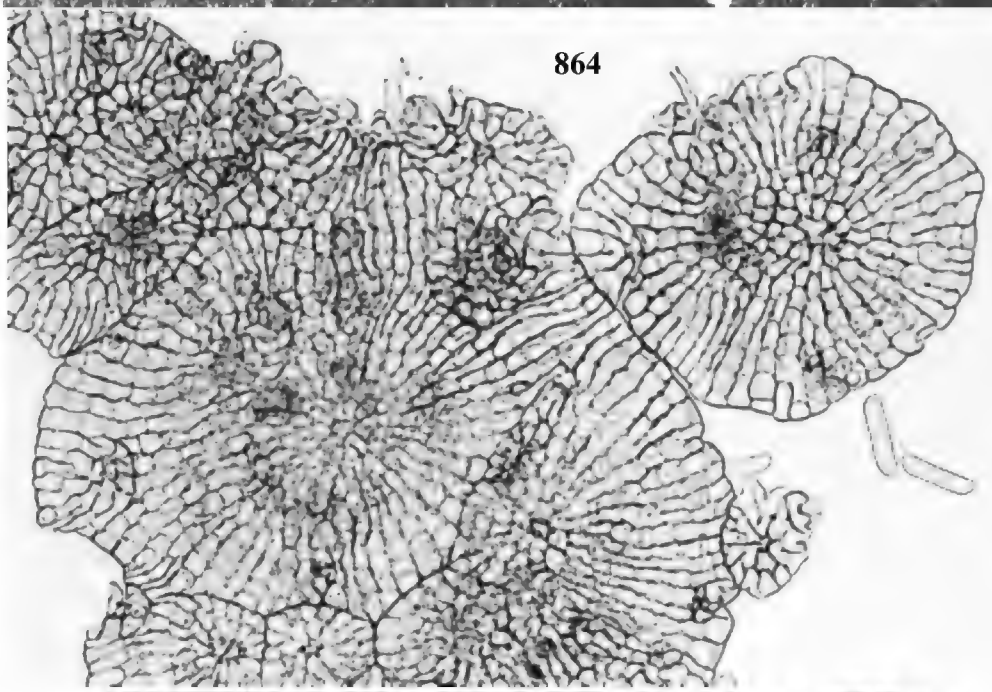
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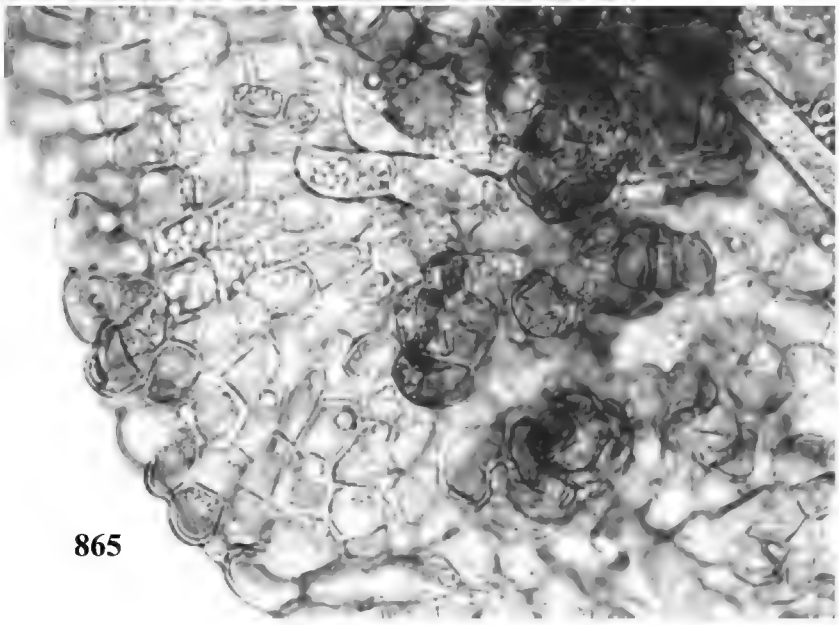
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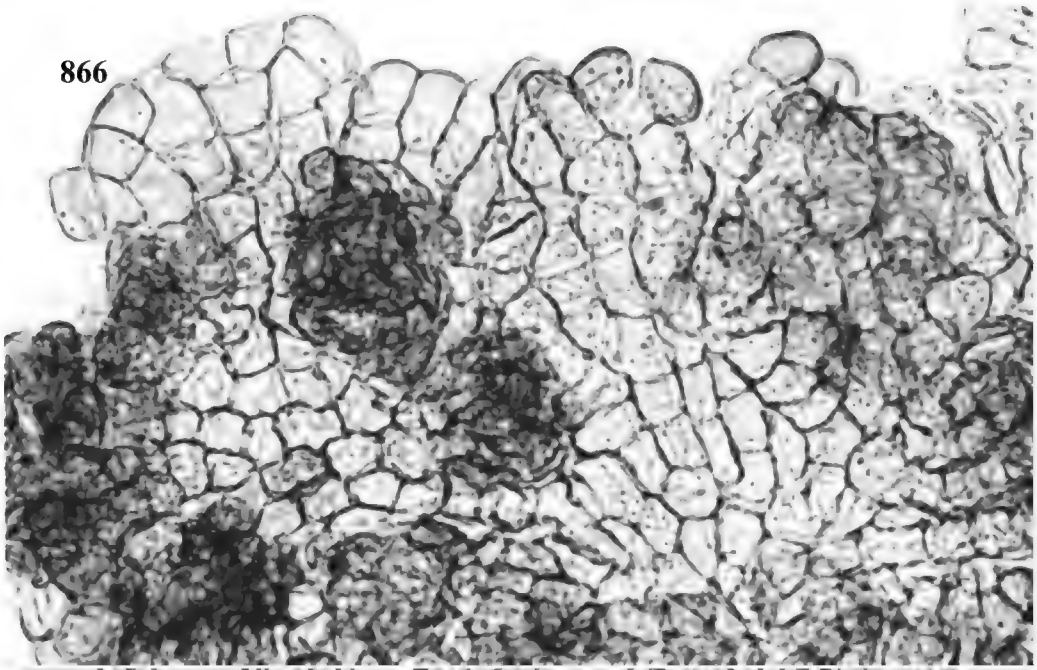

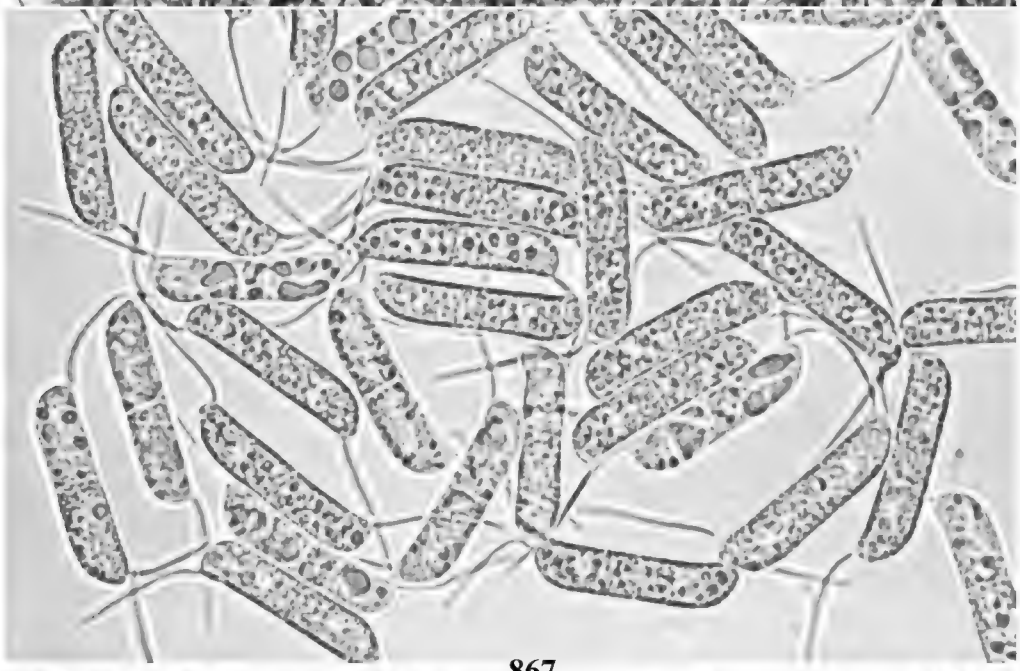

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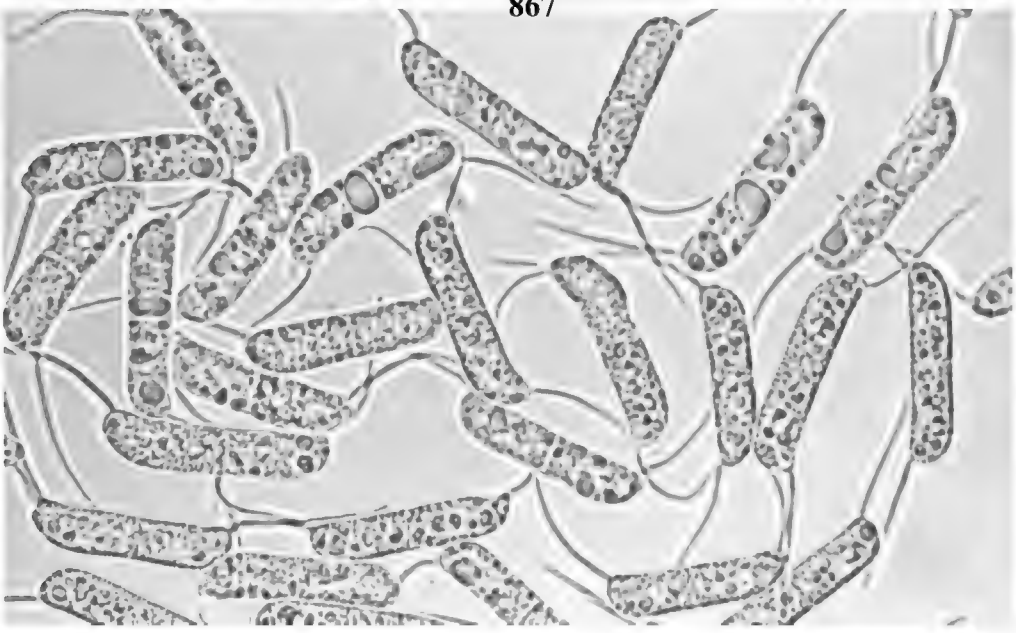
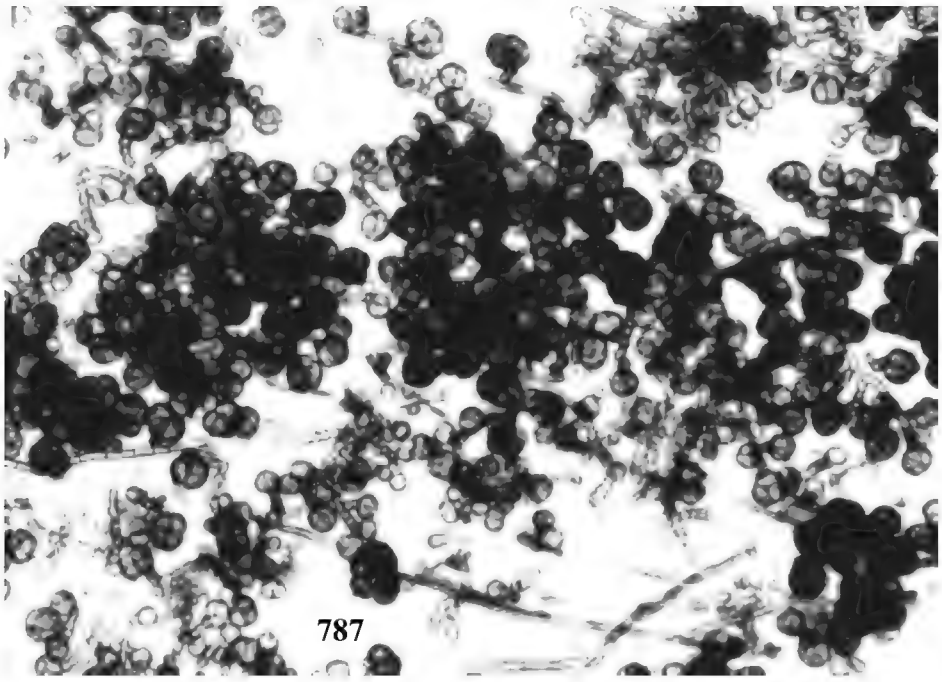


1293 ***Olpitrichum macrosporum*** (Farlow ex Sacc.) Sumstine, Mycologia **3**: 55. 1911.
HAB In ramunculo mortuo sicco denigrati fruticis spinosi; prope Vryburg (on the road side of National Route 14), South Africa: Sept. 8, 1995. MFC-5A091.
REF T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 102.

Paradictyoarthrinium T. Matsushima anam.- gen. nov.
Ad Hyphomycetem pertinet.
Conidiophora mononematosa macronematosa, erecta, simplicia vel interdum parce ramosa, septata, ad septa leviter constricta, brunnea. Cellulae conidiogenae in conidiophoris integratae, terminales vel intercalares, lateraliter uni interdum bi-blasticae. In conidiophoro conidium primum apicaliter formatum, conidia alia lateraliter basim versus formata et matura. Conidia dictyospora, brunnea, sicca. **Etym.**: *para-Dictyoarthrinium* = superficailly similar to *Dictyoarthrinium* Hughes (1952). **Species typica**: *Paradictyoarthrinium diffractum* T. Matsushima anam.- sp. nov.

1294 ***Paradictyoarthrinium diffractum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo in rivulo; prope Sparkling Water Hotel, prope Rustenbusrg, South Africa; Sept. 21, 1995. **Typus**: CMA cultura exsiccata, MFC-5A135. **Etym.**: *diffractum* = conidiophores easily broken in pieces.
DESCR In CMA: Colonia modice crescens, hyphis aeriis sparsis, olivaceo-atera minute pulveracea a sporulatione abundanti. Hyphae vegetativae ramosae septatae laeves 1.0-4.0 µm latae, subhyalinae ad fuscae. Conidiophora ex hyphis vegetativis repentibus 1.5-3.5 µm latis laevibus modice brunneis plus minusve dense lateraliter oriunda, erecta, simplicia vel interdum parce ramosa, usque ad 35 µm longa,3.5-4.5 µm lata, 0-4-septata, ad septa leviter constricta, laevia, pallide brunnea ad brunnea. Cellulae conidiogenae in conidiophoris integratae, terminales vel intercalares, frequenter directe lateraliter ex hyphis vegetativis repentibus oriundae, doliiformes, 3.5-5 µm longae, 3.5-4.5 µm latae, lateraliter uni-blasticae interdum bi-blasticae, brunneae. In conidiophoro conidium primum apicaliter formatum, conidia alia lateraliter basim versus formata et matura. Conidia in forma atque magnitudine variabilia, plus minusve subglobosa cubica vel subcylindrica, 9-20(-30) µm in diam. vel in lato, T-formiter vel cruciatim septata in conidiis parvis, muriformia in conidiis magnioribus, ad septa constricta, aspera, brunnea vel atro-brunnea, atera sicca in massa. Ad maturitatem conidia facile secedentia, conidiophora facile ad septa disarticulata, frequenter conidia cum cellulis conidiogenis liberata.
ICO P787: sporulation on CMA, x 400.
P788, P789, P790, P791, P792, P793: young conidiophores and conidia, x 1000.
F874: conidia and disarticulated conidiophores, only showing shape size and septation, CMA, x 1000. (in p. 212)



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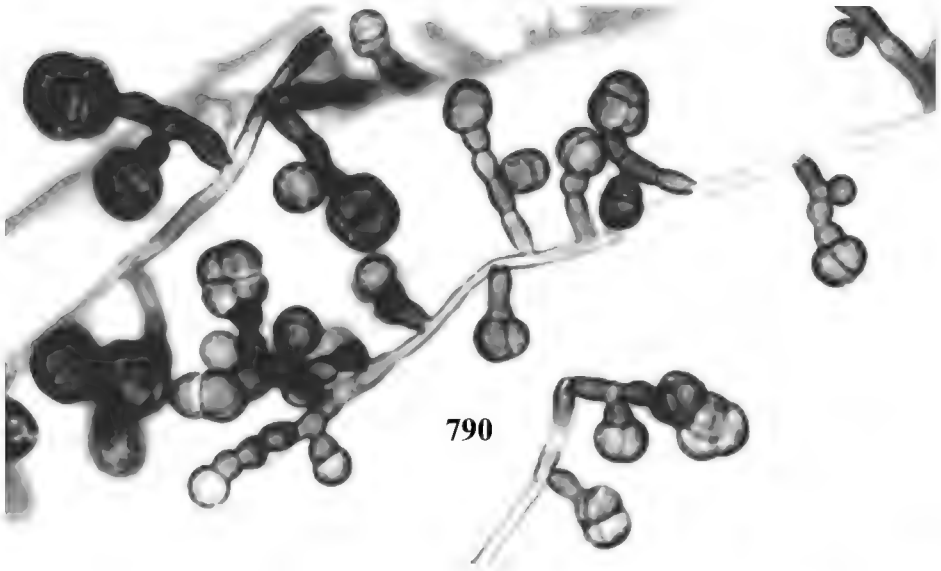

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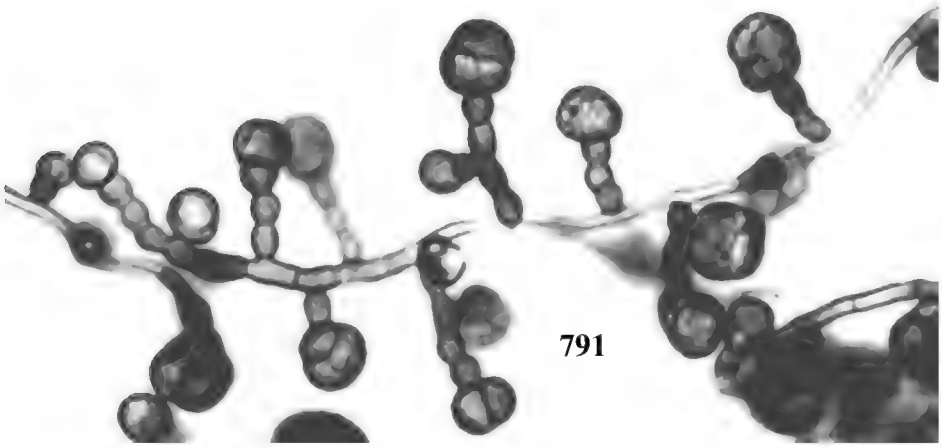

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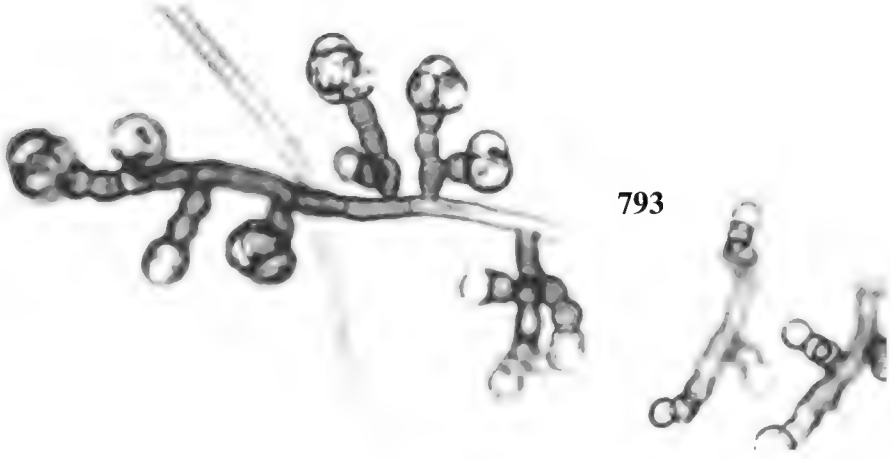


793

Pararobillarda T. Matsushima anam.- gen. nov.

Ad Coleomycetem pertinet.

Genus novum *Robillardam* Sacc. (1882) simile, differt conidiomatibus hyalinis, cellulis conidiogenis enteroblasticis-phialidicis atque conidiis non-septatis. **Etym.**: *para-robillarda* = superficially similar to *Robillarda*. **Species typica**: *Pararobillarda caffera* anam.- sp. nov.

1295 ***Pararobillarda caffera*** T. Matsushima anam.- sp. nov.

HAB In ramunculo mortuo in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: b/c cultura exsiccata, MFC-5A166.

DESCR In b/c: Effusa, hyphis aeriis nullis. Conidiomata dense dispersa, subepidermalia, globoso-depressa, 150-600 µm in diam., incolorata, initio clausa, postea erumpentia. Conidiophora praecipue deficientia. Cellulae conidiogenae ex stromate basali pseudoparenchymatoso hyalino dense orientes, cylindricae, simplices, rectae, 15-60 µm longae, 1.5-2.0 µm latae, laeves, hyalinae, apice truncatae enteroblasticae-phialidicae, immersae materia gelatinosa hyalina. Conidia cylindrica, recta, continua, 20-27.5 x 3.5-4.0 µm, laevia, apice appendice, hyalina ad pallide cremea mucosa in massa; appendices cellulares, basi in 2-4, praecipue 3 ramos divisae, laeves subulatae 15-30 µm longae basi 1.5 µm latae apicem versus ca. 0.5 µm attenuatae.

In CMA: Colonia effusa, fere incolorata, hyphis aeriis sparsis. Conidiomata dense dispersa, semi-immersa, initio globosa clausa fere incolorata, mycelio albo delicato obstecta, postea dehiscentia postremo cupulascentia; peridium membranaceum, aspectu superficali cellulis angularibus hyalinis compositum.

In PDA: Colonia tenuiter effusa, sine hyphis aeriis, pallidissime brunnea, fere sterilis. Gemmae fuscae molles grandes forma irregulares abundanter ad marginem coloniae in annulo productae, solitariae vel confluentes, laeves, udae; quaeque textura epidermoidea fusca in strato extimo, intra subhyalina gelatinosa non-cava delicate plectenchymatosa.

ICO P701: conidiomata on b/c, by reflected light, showing hyaline slimy conidial masses on conidiomata, x 40.

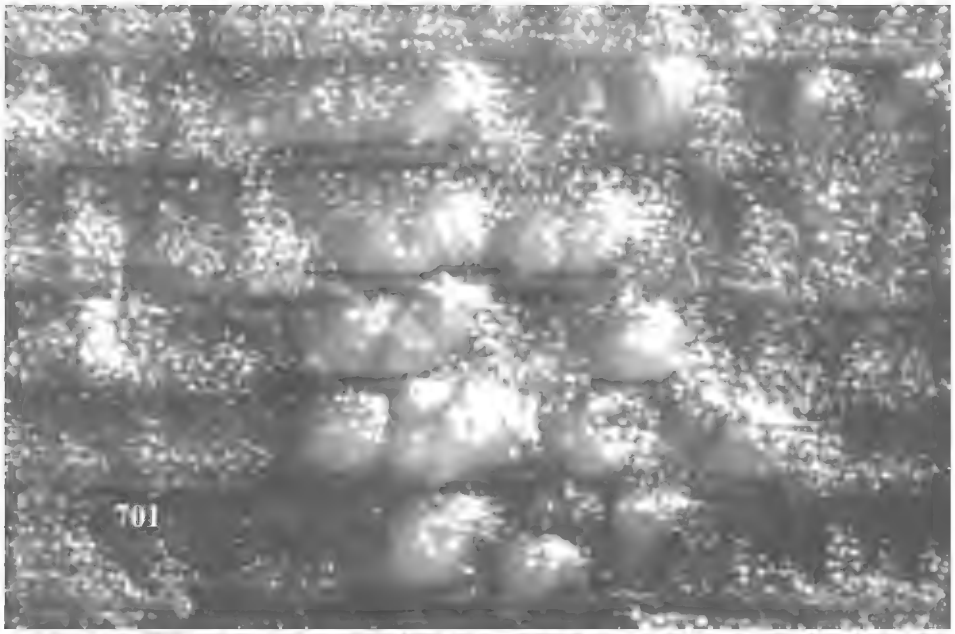
P702: the same, by transmitted light, showing erumpent conidiomata, x 40.

P703: young conidioma, originally closed but ruptured by gentle pressure, CMA, x 200.

P704: delicate white fringe hyphae which encircling conidiomata formed on CMA, x 400 (phase contrast).

P705: coniogenous cells and young conidia on pseudoparenchymatous inner layer, x 400 (phase contrast).

P706: conidia, x 1000 (phase contrast).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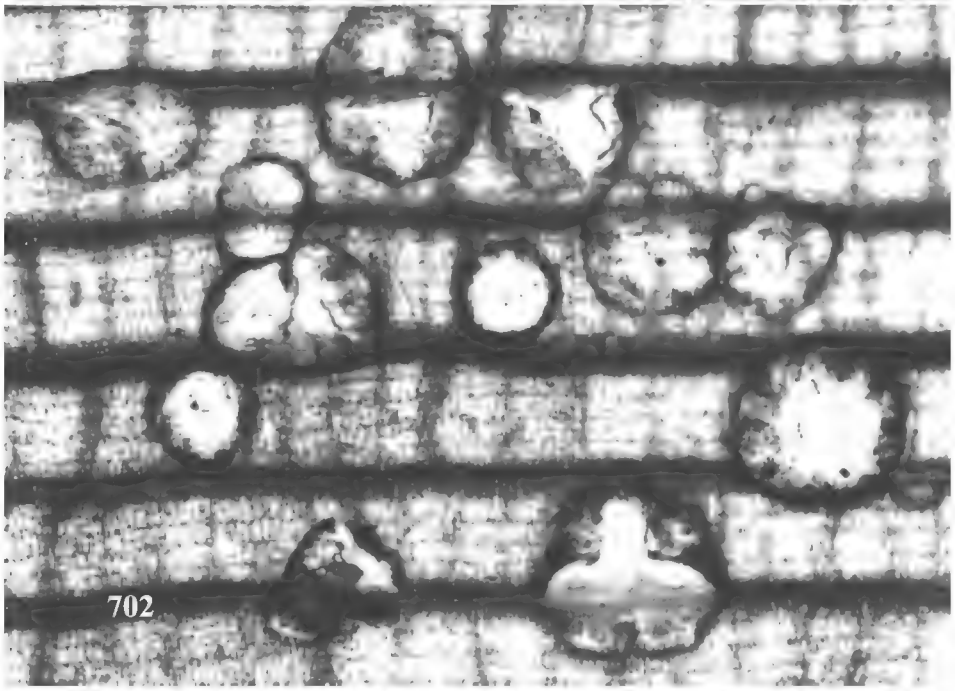
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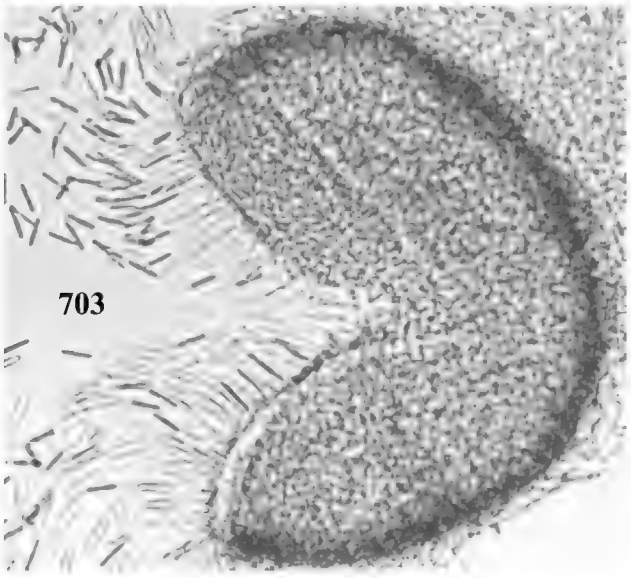
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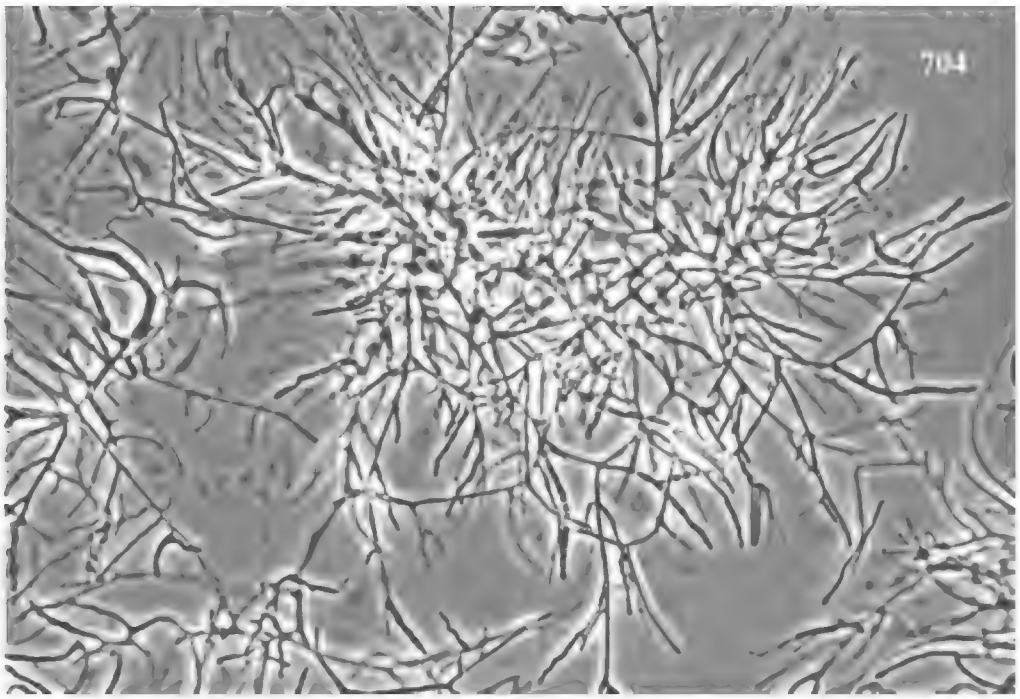
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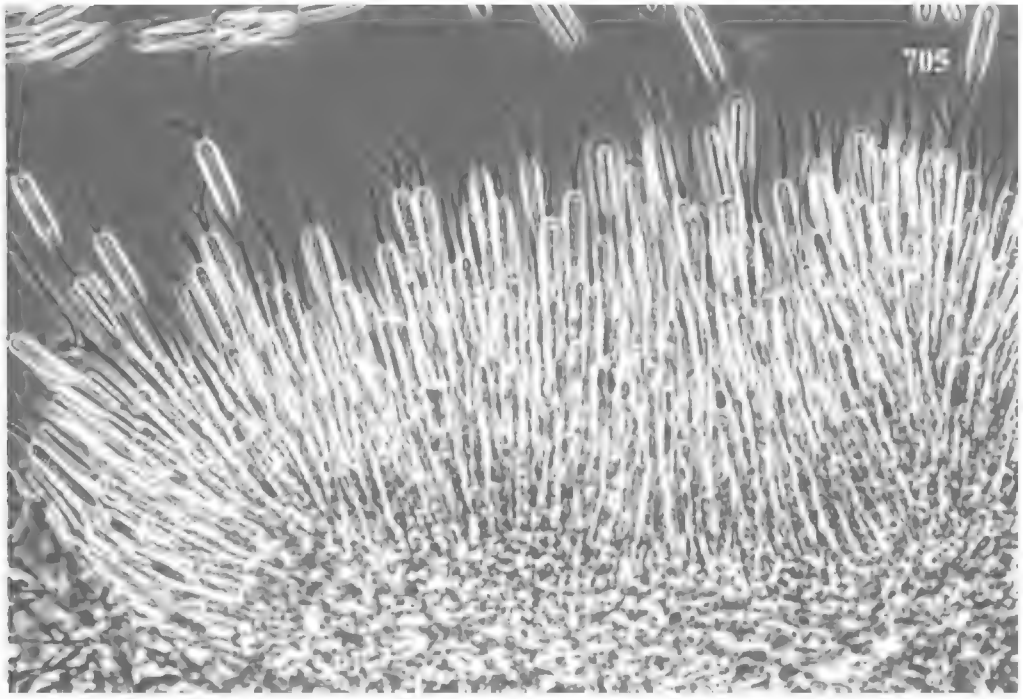
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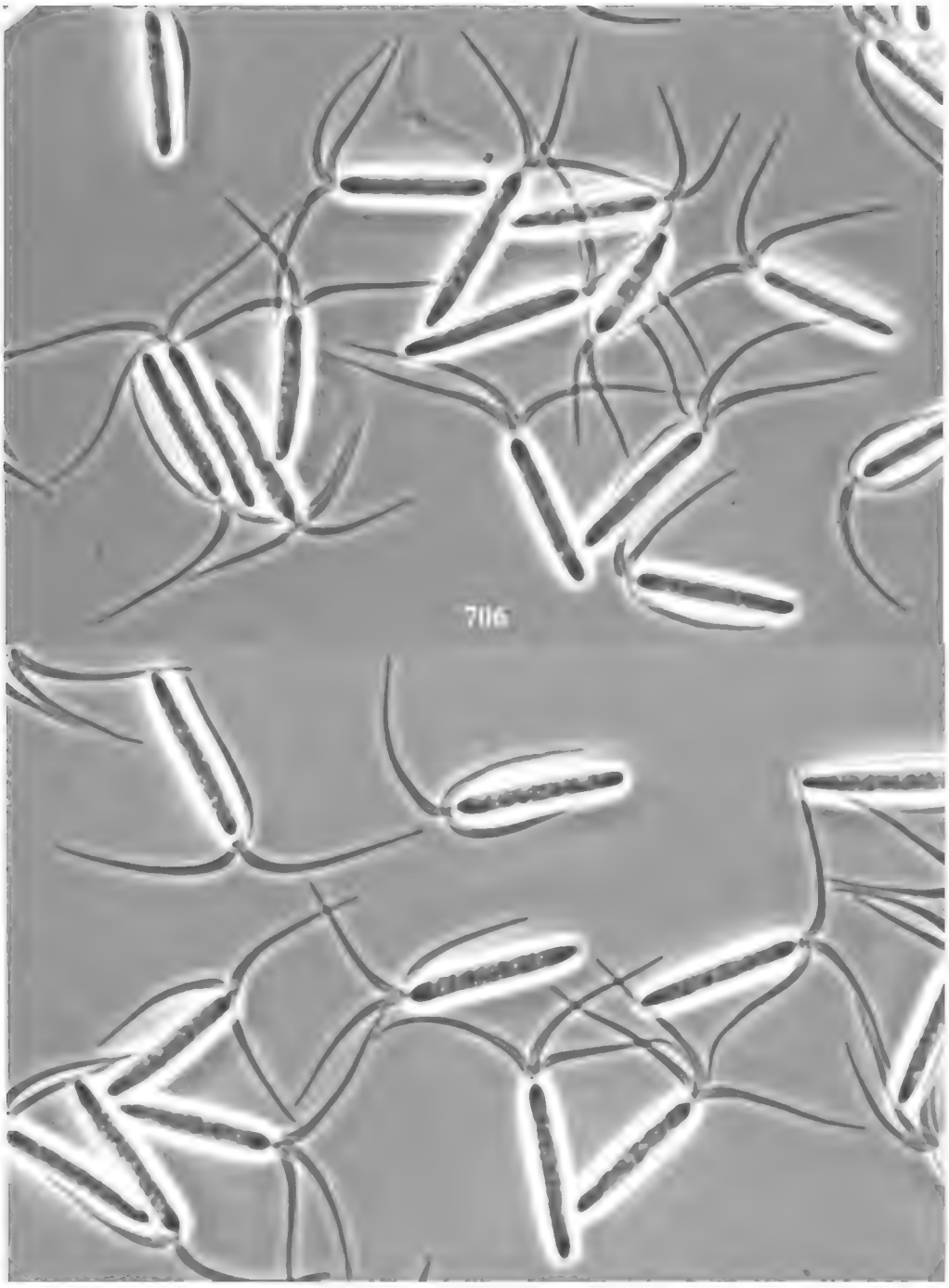
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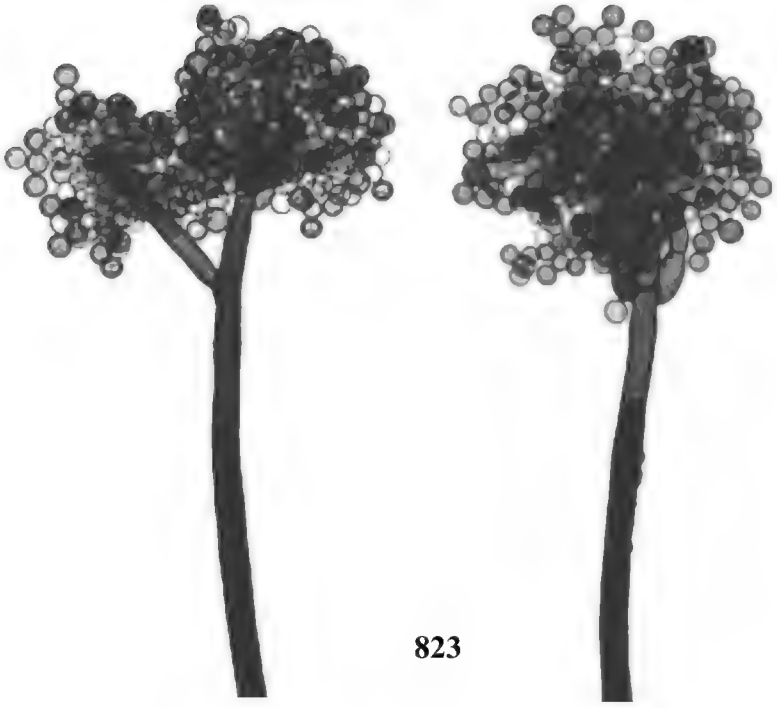
1296 ***Periconia paludosa*** Mason & M. B. Ellis, Mycol. Pap. **56**: 94-95. 1953.
HAB In gramine mortuo; Spes Bonia, prope Caledon, South Africa; Sept. 12, 1995. MFC-5A030.
DESCR On b/c: Conidiophores macronematous, mononematous, simple, erect, stout, septate, smooth-walled, dark-brown, bearing a well defined dark brown conidial head at the apex; at the head conidiophores shortly branched, terminal and subterminal branchelets (i. e. conidiogenous cells) producing simple or branched conidial chains. Conidia globose 6.5-9 µm in diam., minutely rough-walled, a basal scar scarcely visible, brown, in chains maturing basipetally. Degenerated forms as on CMA also formed.

On CMA: Colonies spreqding, shortly and loosely floccose, brownish gray. Conidiophores micronematous and conidial masses formed directly on aerial hyphae or on rudimentary short brown conidiophores. Conidia globose, in simple or branched chains, 6.0-8.0 (-9.0) µm in diam., wall ca. 0.5 µm thick, minutely rough, brown.
REF Mason, E. W., & M. B. Ellis. 1953. Mycol. Pap., C.M.I. **56**.
ICO P823: conidial heads, on CMA, x 400.
P824, P825: conidia, x 1000.



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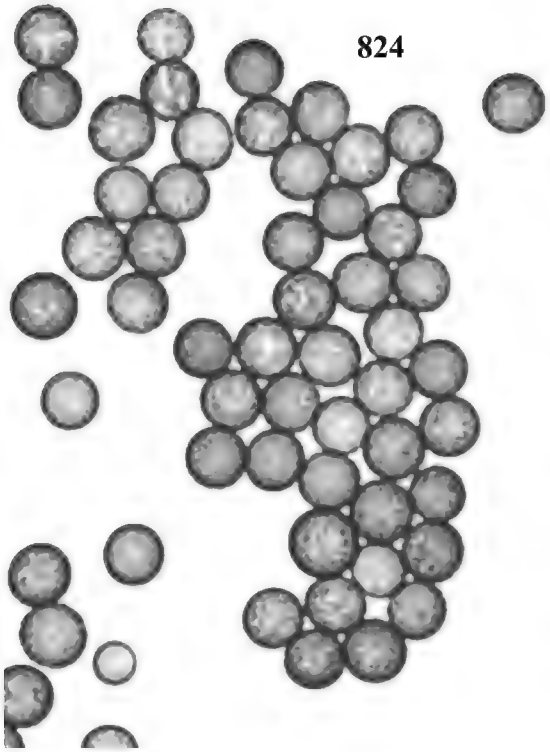

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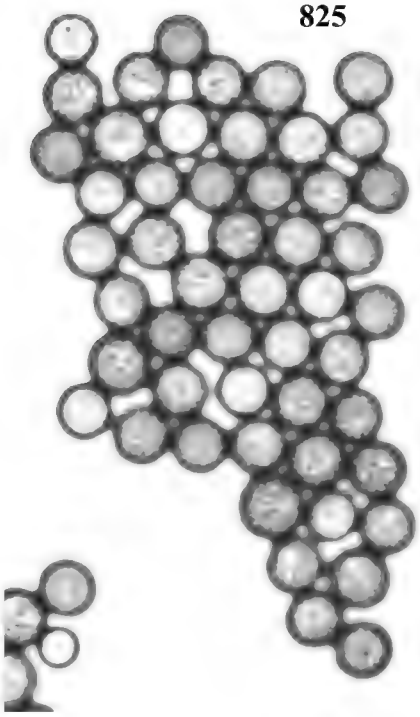
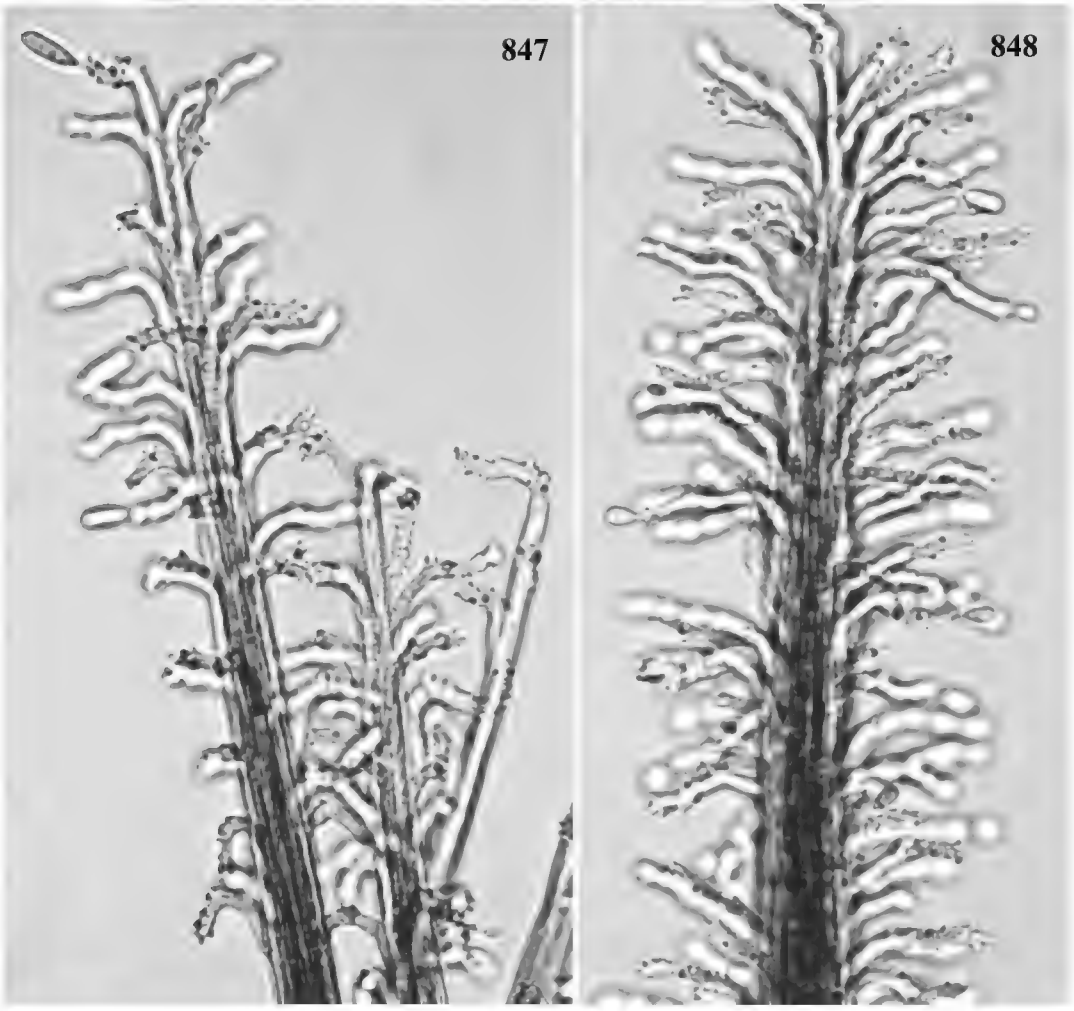


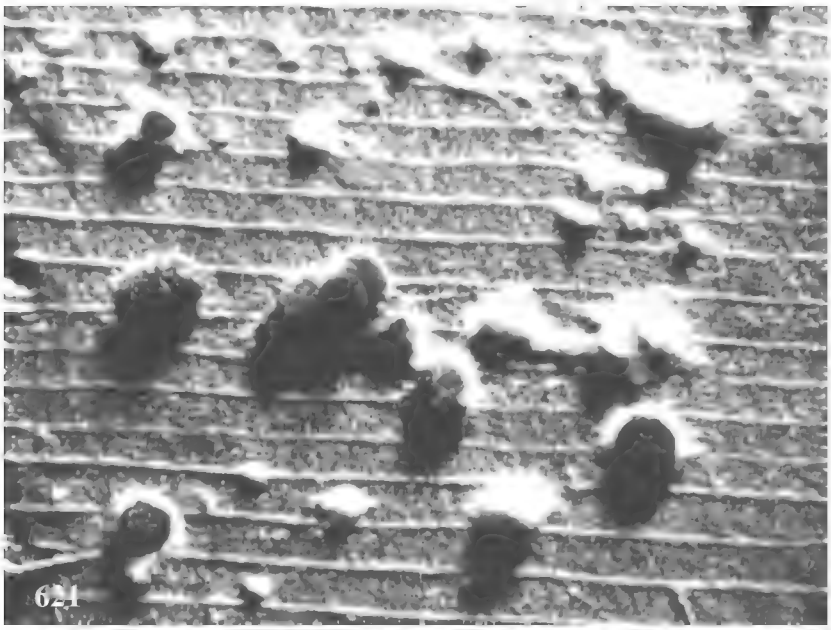
825

1297 ***Phaeoisaria caffera*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti *Podocarpi* sp.; Kirstenbosch National Botanical Garden, prope Cape Town, South Africa; Sept. 11, 1995. Typus: b/c cultura exsiccata, MFC-5A102.
DESCR In b/c: Maxime similis *Phaeoisariam clematidis*, sed differens solum in magnitudine conidiali. Conidia solitaria, obovata, continua, 7.5-12 x 2.7-3.5 µm, laevia. Forma *Rhinocladiellae* (forma degenerata) formata. In CMA: Forma *Rhinocladiellae* abundanter formata, synnemata vix formata.
MEM The present species is close to *Phaeoisaria clematidis* except the conidial size. The conidial size of the latter is: 4-10 x 1.5-3 µm, mostly 5-7 x ca. 2.5 µm, sometimes only 4-5.5 x 1.5-2.5 µm. (fide Deighton, F. C. 1974.Trans. Br. mycol. Soc. **62**: 243-252); 4-10 x 1.5-2.5 µm (fide Sutton, B. C. Mycol. Pap. **132**: 87-89. 1973); 4-9 x 1.5-2.5 µm (fide Romero, A. I. 1983. Boll. Soc. Argentina Bot. **22**: 57-79); 5.5-8 x 2-3 µm (fide Chang, Ho-Shii. 1989. Bot. Bull. Academia Sinica **30**: 161-166); 4.5-10 x 2-3 µm (fide T. Matsushima, 1971, Microfungi of the Solomon Islands and Papua-new Guinea).
ICO P846: conidia, x 1000.
P847, P848: synnemata, on b/c, x 1000.


847
848

1298 ***Phialophoropsis nipponica*** T. Matsushima anam.- sp. nov.
HAB In ramulo putrescenti arboris latifoliae; Kobe Municipal Arboretum, Kobe City, Japan; Jan. 1996.
Typus: b/c cultura exsiccata, MFC-6M006.
DESCR In b/c: Colonia effusa, hyphis aeriis sparsis. Sporodochia dispersa, solitaria vel gregaria, frequenter confluentia, superficialia, pulvinata, circularia, hyalina, 60-150 µm in diam, nec setis nec hyphis specialibus, margine hyphis pauciramosis septatis sinuolatis 2.0-3.5 µm latis laevibus albis praedita. Conidiophora deficientia. Cellulae conidogenae dense obtegentes stromate hyalino pseudoparenchymatoso, cylindricae, apice non angustatae, 5-12 µm longae, 3-5 µm latae, apcie enteroblasticae, ore distincte poly-strato vel ore intrinsecus incrassato. Conidia breviter cylindrica, 5-7.5 x 3.5-5.5 µm, apice rotundata basi truncata 2.5-3.5 µm lata, continua, laevia, hyalina, cremea mucosa in massa et sporodochia obtegentia. ** Apothecia aliquot producta, solitaria vel gregaria, acetabuliformia, sessilia, margine circulari plano, pallide brunneola (in statu sicco brunneo-greisea), 150-700 µm in diam., 150-250 µm alta; excipulo pseudoparenchymatoso pallide brunneo, hymenia ex vallo paralleli paraphysibus abundantibus atque ascis minoribus composita. Paraphyses filiformes, simplices vel parce ramosae, septatae, laeves, parte inferiore 2.0-3.0 µm latae pallide brunneae ad subhyalinae, parte superiore 2.0-4.0 µm latae hyalinae, apice rotundatae, non inflatae, contento guttatae. Asci cylindro-clavati, paraphysibus intermixti, 8-spori. Ascosporae oblongo-ellipsoideae, 6.5-7.5 x 4.5-5.0 µm, 1-2 guttis, pagina laevi, hyalinae, maturitatem singlatim expulsae.

In CMA: Colonia modice crescens, incolorata, hyphis aeriis solitariis vel funicularibus albis debiliter formata. Sporodochia abundanter in parte centrali, pulvinata, circularia, 120-350 µm in diam., aggregagta vel solitaria, frequenter confluentia. Apothecia non formata.
MEM The anamorphosis is similar to *Phialophoropsis cambrensis* Brady & Sutton, in Trans. Br. mycol. Soc. **72**: 337-339. 1979.
REF Batra, L. R. 1967. Mycologia **59**: 976-1017. => *Phialophoropsis trypodendri* gen. et sp. nov. ** Hennebert, G. L., & A. Bellembere. 1979. Rev. Mycol. **43**: 259-315. Les formes conidiennes des Discomcetes.
ICO P621: apothecia on b/c, x 40.
P622: apothecium in section, x 200.
P623: a part of apothecium, x 1000.
P624: paraphyses, x 1000.
P625, P626: asci, x 1000.
P627: sporodochia on CMA, by transmitted light, x 40.
P628: conidiogenous cells, x 2000.
P629: conidia, x 2000.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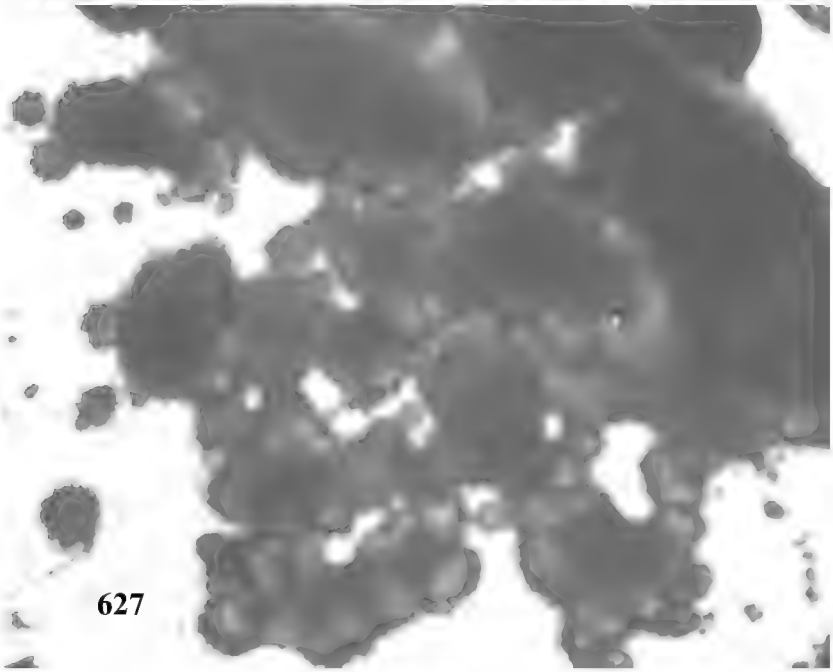
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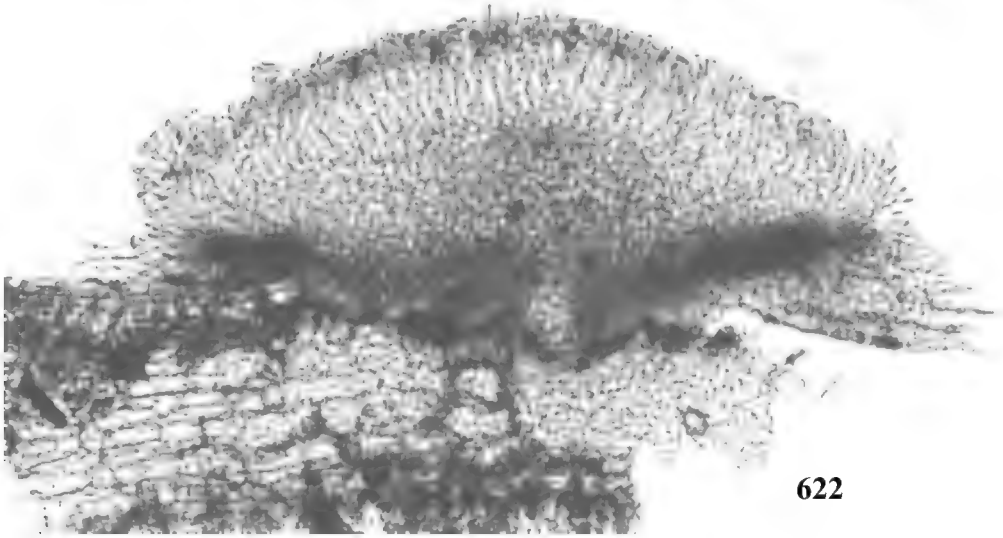
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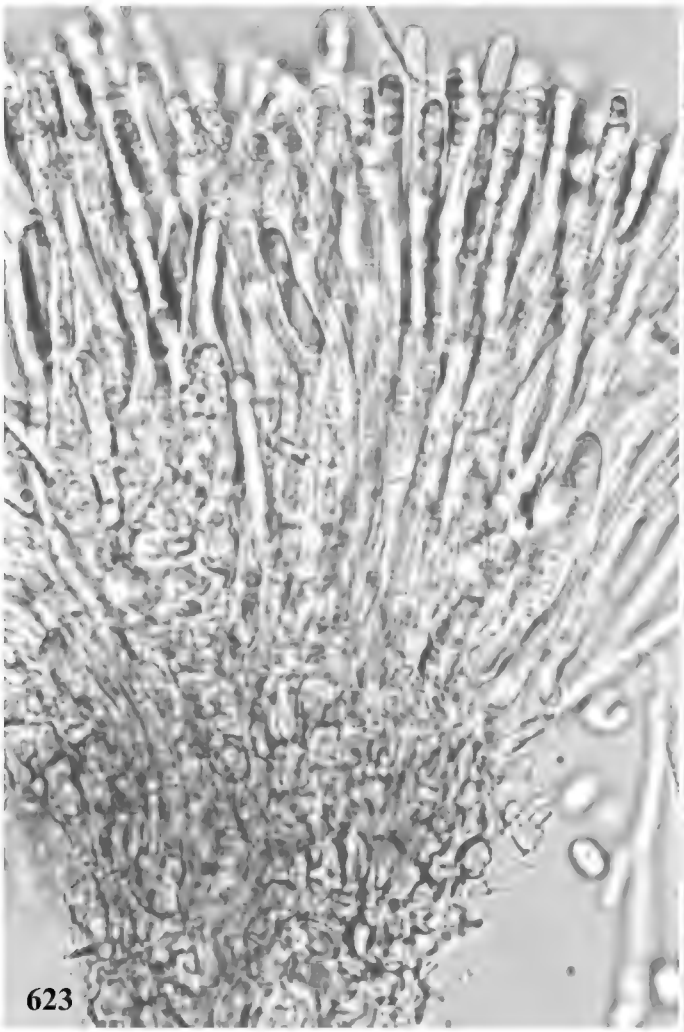

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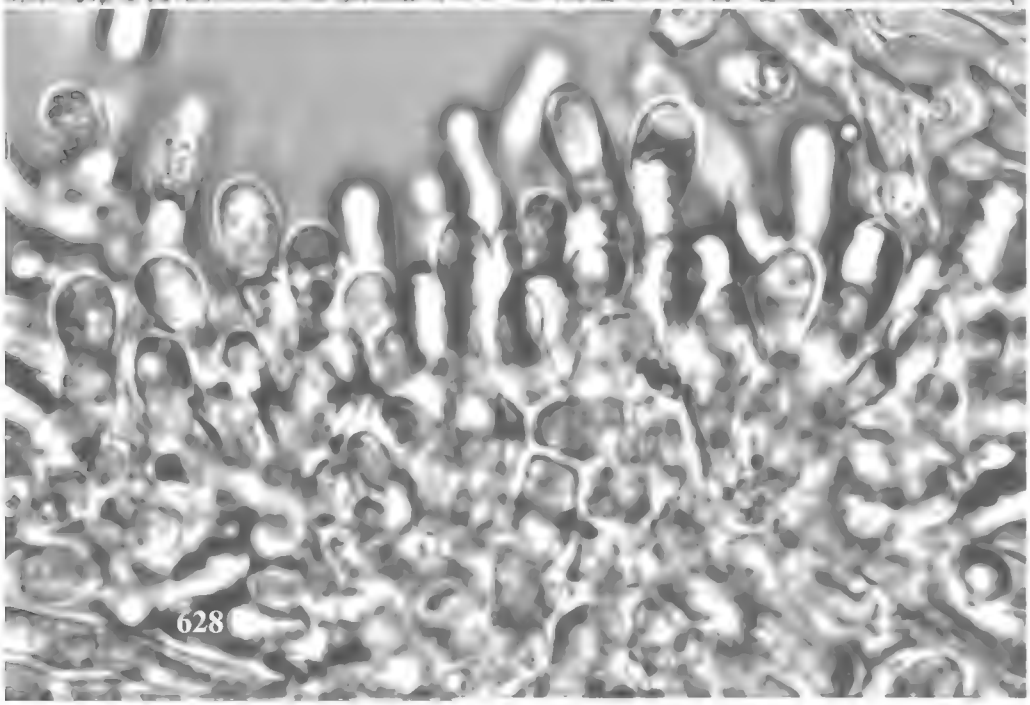
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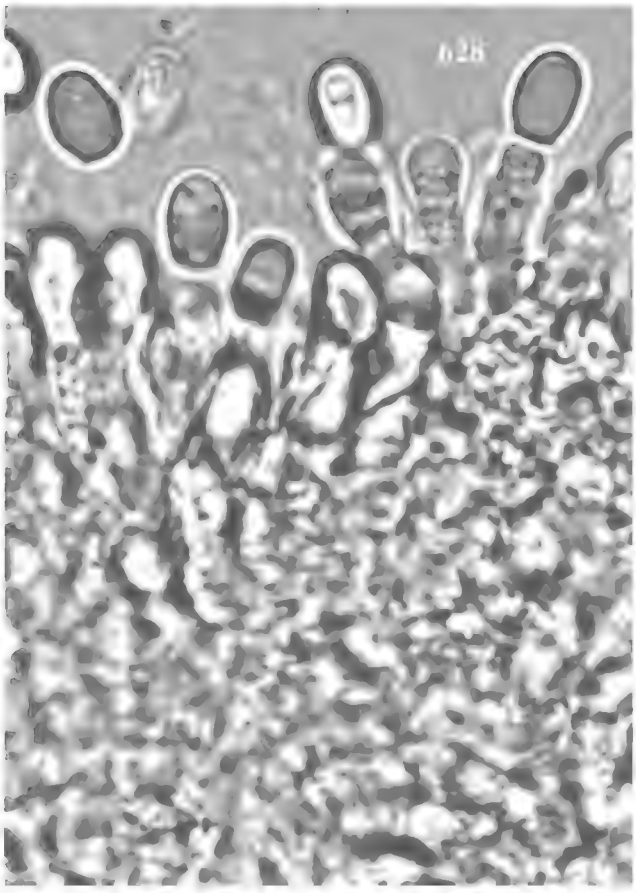
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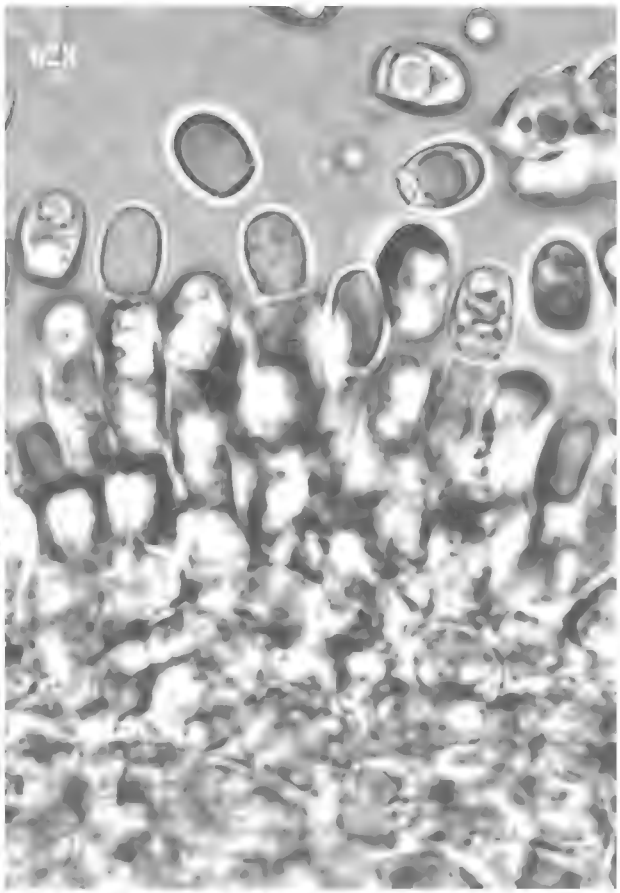
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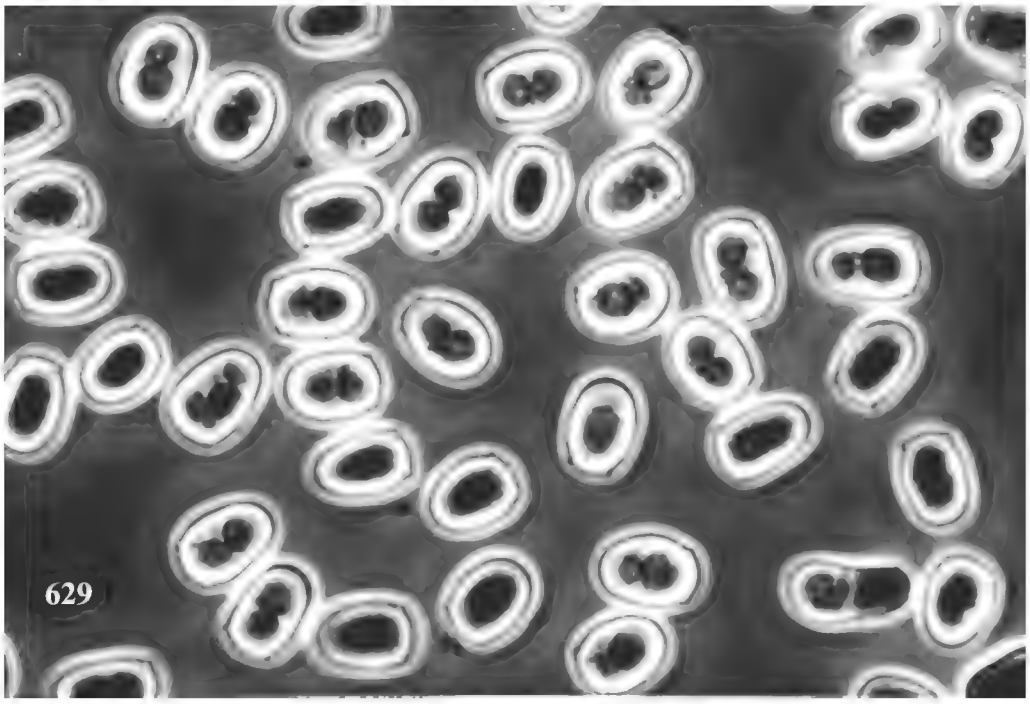
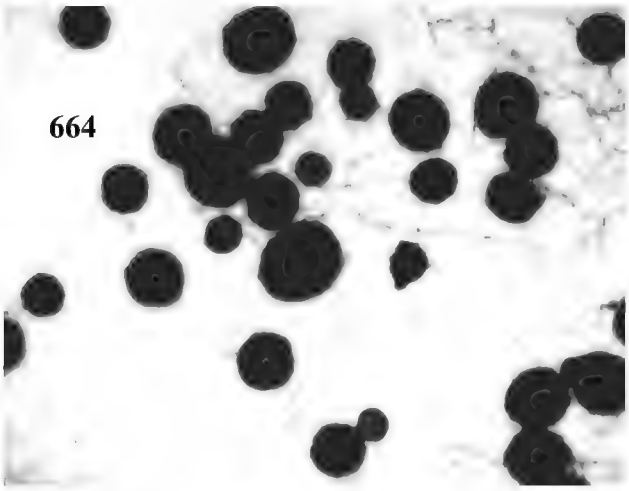

629

1299 ***Phoma knysnensis*** T. Matsushima anam.- sp. nov.
HAB Ex solo sylvae: Knysna, South Africa; Sept. 13, 1995. **Typus**: b/c cultura exsiccata, MFC-5K340.
DESCR In b/c: Colonia effusa, immersa, sine hyphis aeriis. Pycnidia dispersa, solitaria vel gregaria, immersa praeter apicem ostiolatum, ovata ad obpyriformia, 110-370 µm in diam., 1-3-ostiolis; collo ostiolato breviter cylindrico, textura angulari aspectu superficiali. Peridium tenue, parte exteriore e cellulis angularibus complanatis modice brunneis compositum; parte interiore tenue pseudo-parenchymatosum subhyalinum. Conidiophora deficientia; cellulae conidiogenae obtectae pagina peridii intima, subglobosae ampulliformes vel subangulares, 7.5-10 µm altae, 4.5-10 µm latae, laeves, subhyalinae, apice 2.0-2.5 µm latae enteroblasticae-phialidicae ore intrinsecus incrassato. Conidia cylindrica, utrinque rotundata, laevia, 9.5-14 x 2.5-4 µm, hyalina, lactanea mucosa in massa. Teleo-morphosis ignota.

In CMA: Colonia effusa, fere immersa, parte centrali fusca pycnidiis dense dispersis, margine diffusa pallidissime fusca. Pycnidia solitaria vel gregaria, ovata ad obpyriformia, 75-215 µm in diam., semi-immersa vel immersa praeter apicem ostiolatum, fere uni-ostiolata. Chlamydosporae ingotae. Teleomorphosis ignota.
REF Saccardo, Syll. fung. **3**: 1884. ** Allescher, A. 1903. Rabenhorst's Kryptogamen-Flora **I**(6). ** Grove, W. B. 1937. British stem- and leaf-fungi. **I**. ** Sutton, B. C. 1980. The Coelomycetes, C.M.I.
ICO P664: pycnidia on CMA, in top view, x 40.
P665: the same, in lateral view, x 40.
P666: peridium in surface view, x 400.
P667: conidia, x 1000.



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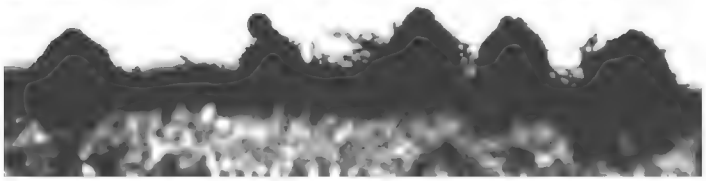

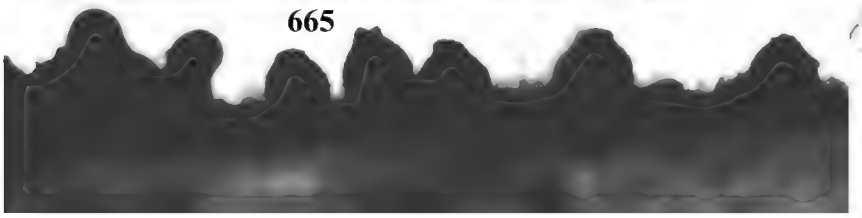

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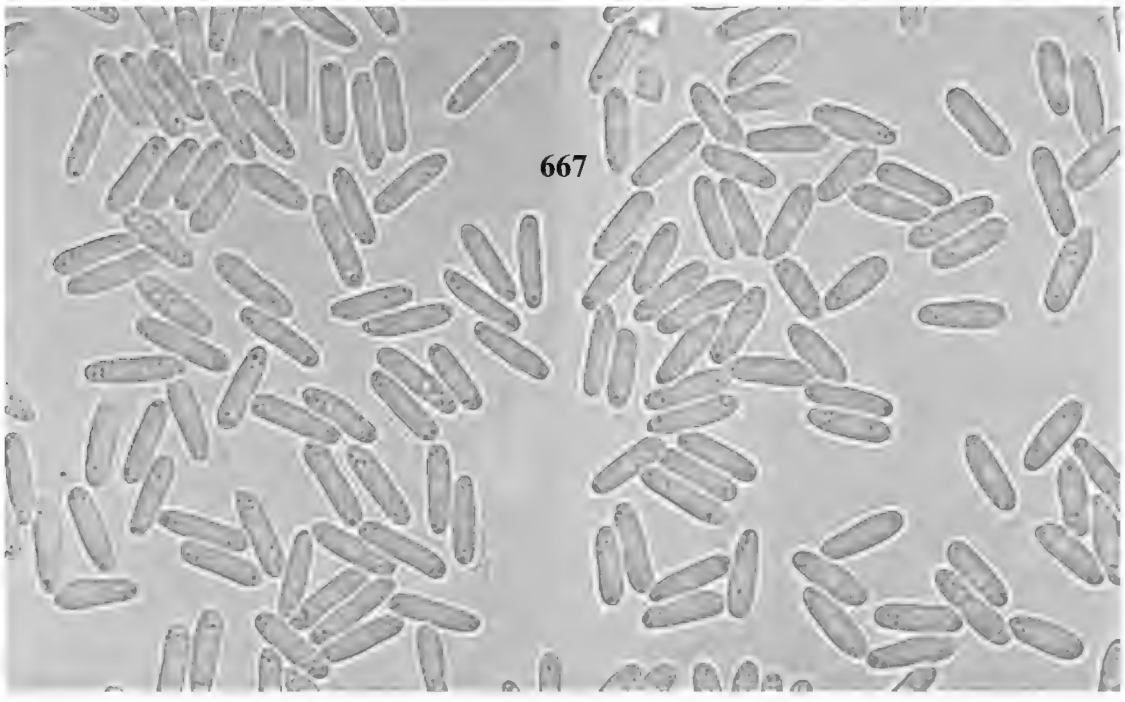
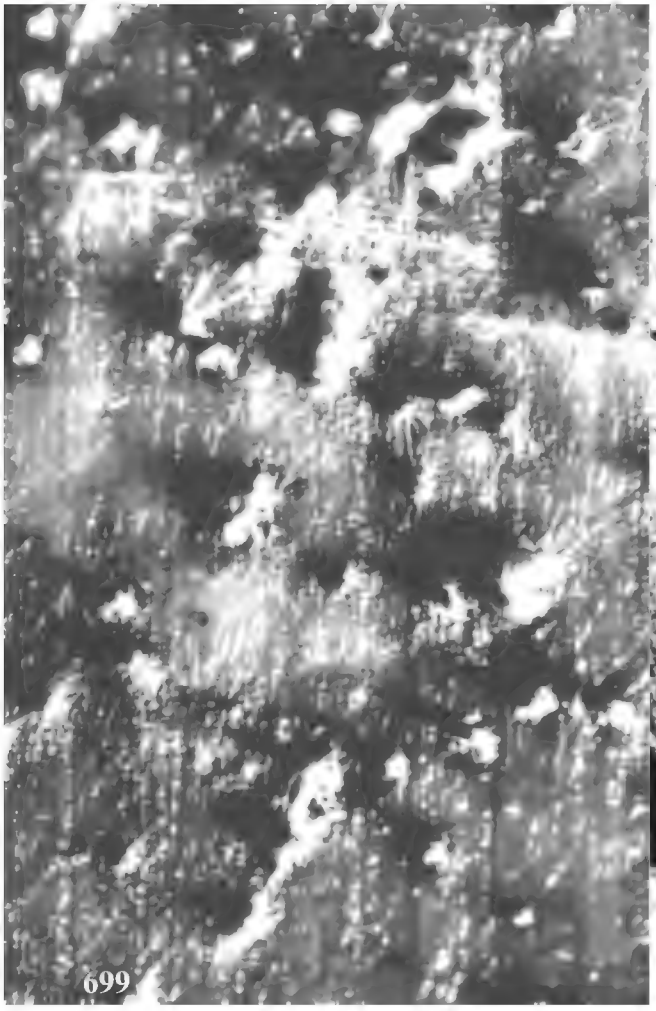
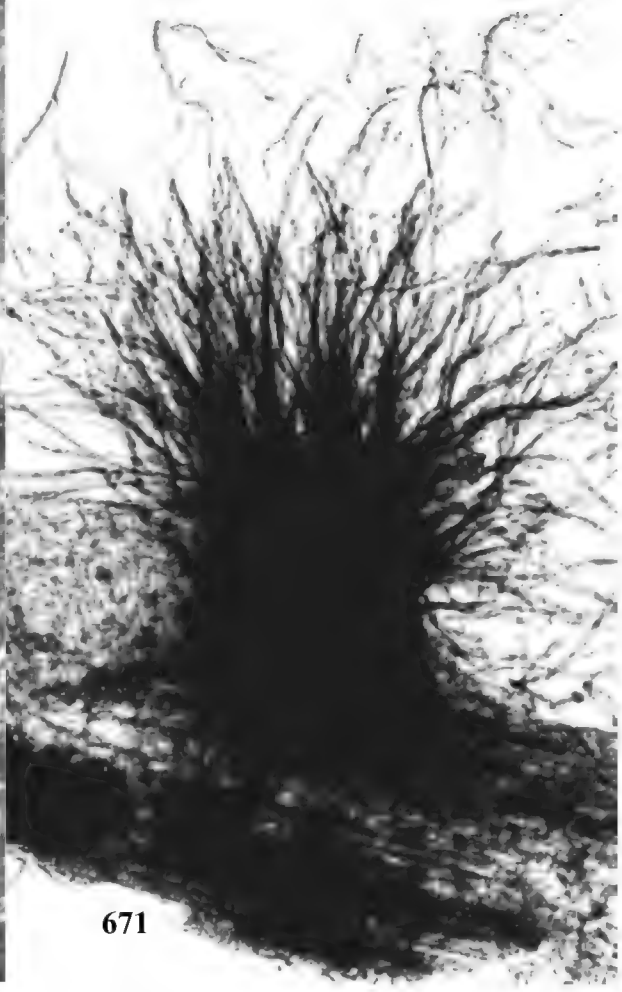


667

1300 ***Phoma macrofusiformia*** T. Matsushima anam.- sp. nov.
HAB In folio mortuo *Perseae americanae* (avocado); Duiwelskloof, prope Tzaneen, South Africa; 27, 1995. **Typus**: b/c cultura exsiccata, MFC-5A248. **Etym**: *macro-fusiformia* = conidia big and fusiform.
DESCR In b/c: Colonia effusa, mycelio aerio griseo, pycnidiis griseis aequaliter dispersis. Pycnidia solitaria vel 2-3 gregaria, semi-immersa, ovata ad obpyriformia, inconspicue ostiolata, atro-brunnea, 75-400 µm diam. (exclusa pilis), pilis radiatis septatis 2.0-3.5 µm latis pallide brunneis ad brunneis (oculo nudo grisea) asperis ad bullatis obtecta; peridium crassum, parete exteriore ex cellulis angularibus complanatis brunneis in parte carbonaceum compositum: parte interiore pseudoparenchymatosum intro pallidium. Conidiophora praecipue deficientia, ubi praesentia breviter cylindrica. Cellulae conidiogenae e cellulis peridii intimis dense oriundae, cylindricae sursum leviter angustatae vel frequenter obclavatae, 10-20 µm longae, inferne 2.0-2.5 µm latae vel usque ad 4.5 µm latae (ubi obclavatae), apic 1.5-2.0 µm latae enteroblasticae-phialidicae ore intrinsecus incrassato vel interdum percurrentes-polyphialidicae collo intrinsecus intermittenter incrassato, laeves, hyalinae. Conidia continua, elliptico-fusiformia, basi obtusa, 24-31 x 5.5-7.5 µm, laevia, hyalina, exsudantia ex ostiolo pro massa lactanea mucosa, in sicco alba ad pallide luteola in massa; interdum conidia veta 1-3 septis transversalibus. Pycnidia tarde matura.
In CMA: Colonia effusa, caespitibus mycelii pallide griseis dense dispersis, fere sterilis.
REF Morgan-Jones, G. 1971. Can. J. Bot. **49**: 1921-1929. => a comment on *Macrophoma* given.
ICO P669: pycnidia on b/c, x 40.
P670: a pycnidium in section, b/c, x 200.
P671: a pycnidium on b/c, x 200.
P673: conidia, x 1000.





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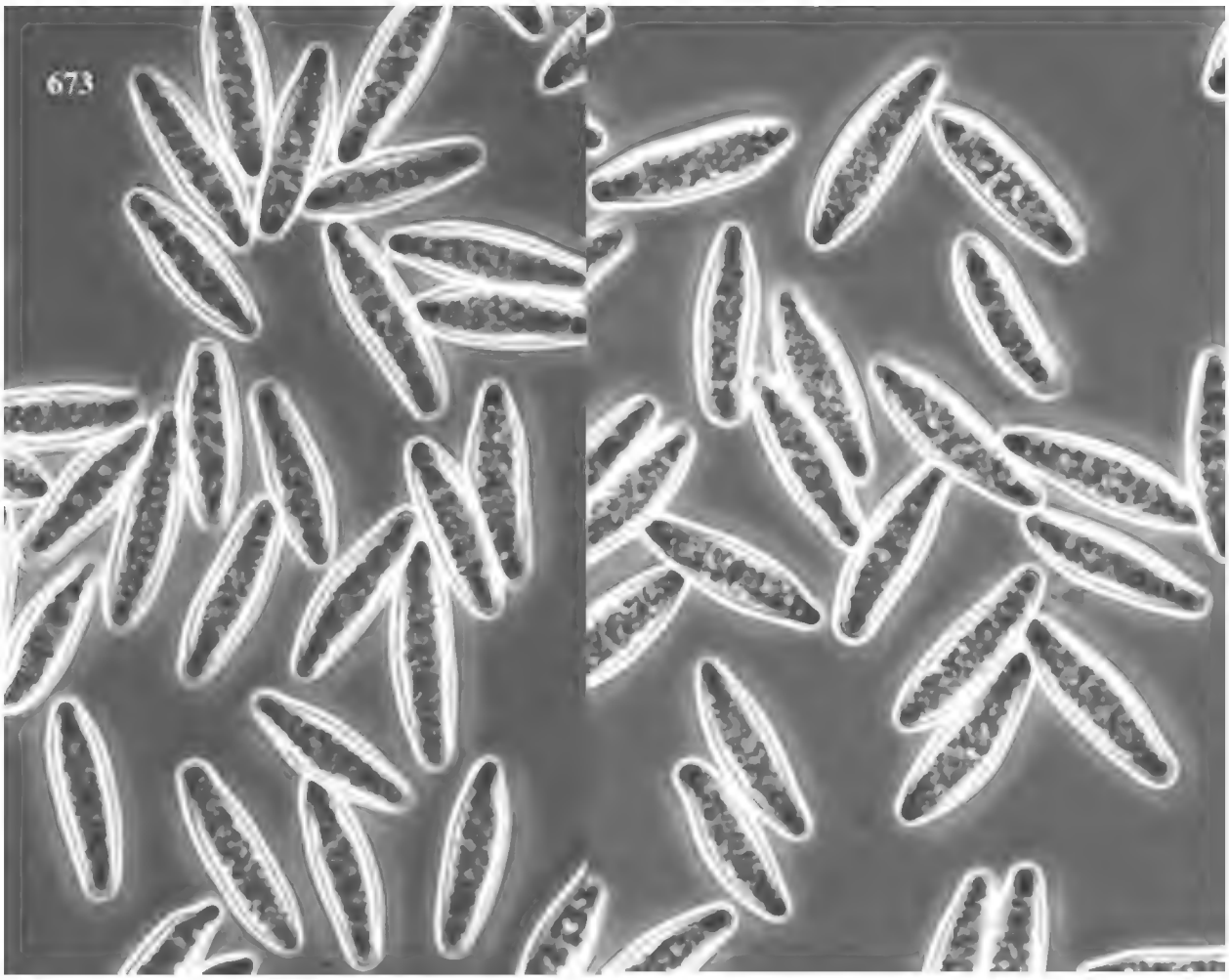
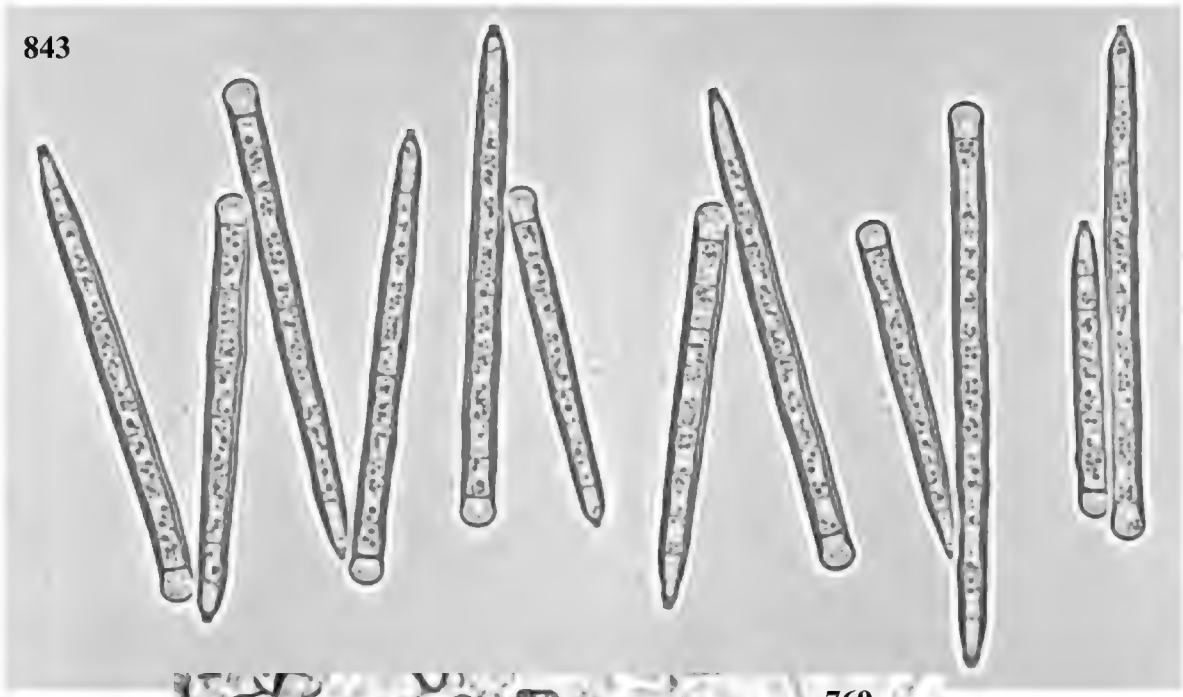

673

1301 ***Pleurophragmium malaysianum*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: CMA cultura exsiccata, MFC-5T054.
DESCR In CMA: Colonia tarde crescens, margine restricta, fere incolorata, hyphis vegetativis hyalinis laevibus non-propiis. Conidiophora mononematosa, macronematosa, erecta, simplicia, 1-5-septata luminibus deminutis, sinuosa, laevia, 25-50(-100) µm longa, 3.5-5.0 µm lata, parte apicali sympodialiter proliferata manifeste denticulata, haylina. Conidia cylindro-clavata, apice rotundata, basi protrudentia, (20-)40-75 µm longa, 3-10-pseudoseptata, parte crassissima 4.0-5.0 µm lata, laevia, hyalina. Synanamorphosis ignota. Teleomorphosis ignota.
MEM Cultures became sterile quickly.
ICO P843: conidia, CMA, x 1000.
F867: conidiophores, CMA, x 1000. (in p. 209)

Polylobatispora T. Matsushima anam.- gen. nov.
Ad Hyphomycetem pertinet.
Conidiophora deficientia vel ubi praesentia breviter cylindrica doliiformia, simplicia vel ramosa. Cellulae conidiogenae lageniformes, hyalinae, apice enteroblastice-phialidicae, productae usque ad aliquot conidia. Conidia aspectu apicali stellata poly-protuberationibus, aspectu laterali complanata, cicatrice minute protrudenti, laevia, pallide brunnea. **Etym.**: *poly-lobati-spora* = conidia with poly-protuberances.
Species typica: *Polylobastispora deltoidea* T. Matsushima anam.- sp. nov.

1302 **Polylobatispora deltoidea** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; 12 June, 1995. **Typus**: CMA cultura exsiccata, MFC-5T195. **Etym.**: *deltoideus* = conidia triangular.
DESCR In CMA: Colonia tarde crescens, fere immersa, in inocula (ex PDA) et circum inoculam fertilis, parte centrali pallide luteo-brunnea, circumferentia incolorata, margine restricta. Hyphae vegetativae ramosae, septatae, laeves, 0.7-2.5 µm latae, hyalinae. Conidiophora deficientia vel ubi praesentia breviter cylindrica ad doliiformia, simplicia, 2-15 µm longa, 1.5-2.5 µm lata, 0-2-septata, hyalina. Cellulae conidiogenae lageniformes, ex hyphis repentibus directe oriundae vel in conidiophoris acro-pleurogene oriundae, 3-5.5 x 2-3 µm, apice enteroblasticae-phialidicae, ore intrisecus inconspicue incrassato, tantum usque ad 3-4 conidia formantes, laeves, hyalinae. Conidia deltoidea aspectu apicali, 6-8 µm in diam. circumscriptionis, aspectu laterali oblongo-elliptica 3.5-4.5 µm crassa, cicatrice minute protrudenti, laevia, pallide brunnea, fusca in massa.
ICO P769: sporulation on CMA, x 1000.
P770: conidia, x 2000.
F877: conidiophores, conidiogenous cells and conidia, CMA, x 1000. (in p. 212)
F878: conidia in apical view, CMA, x 1000. (in p. 212)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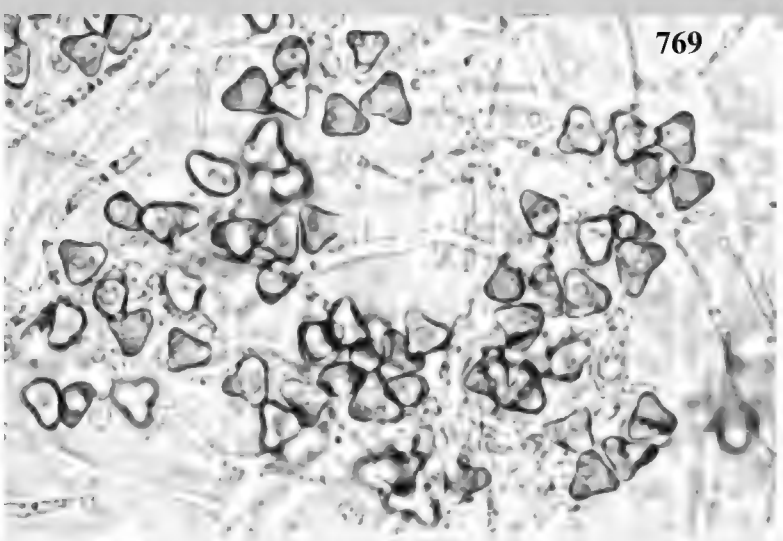
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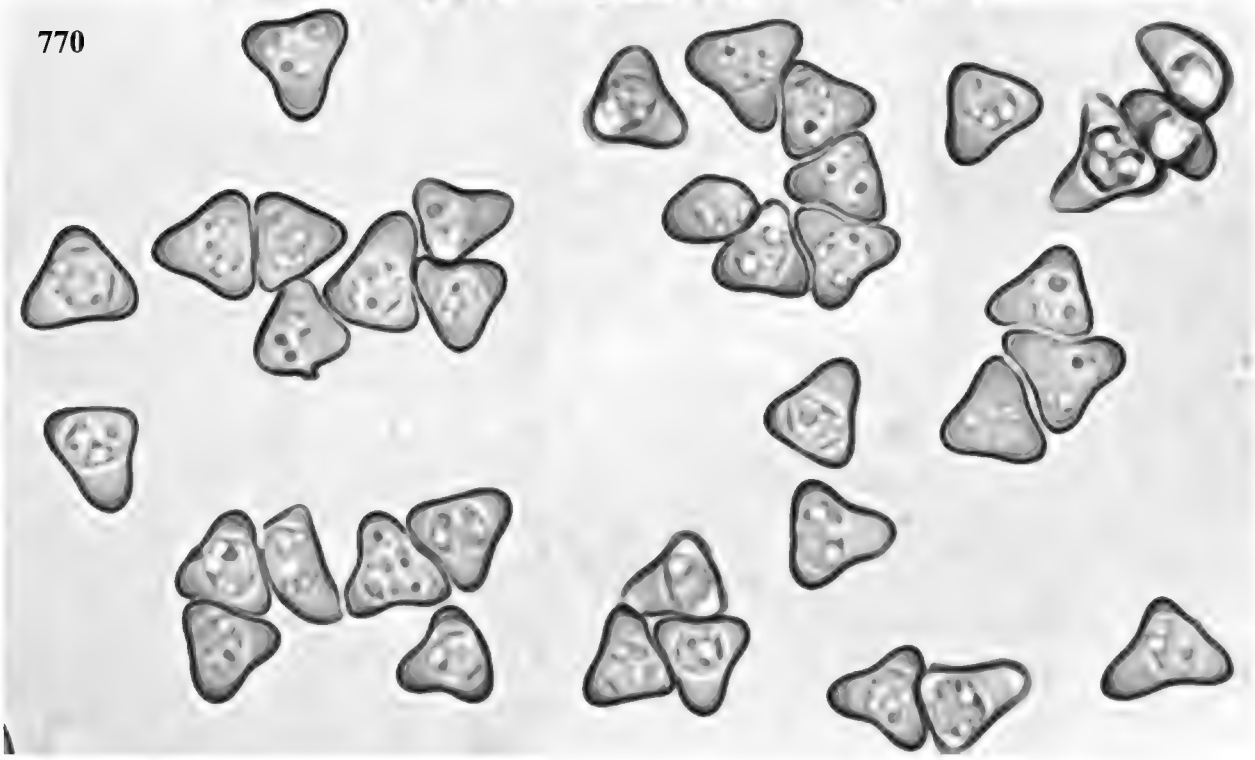
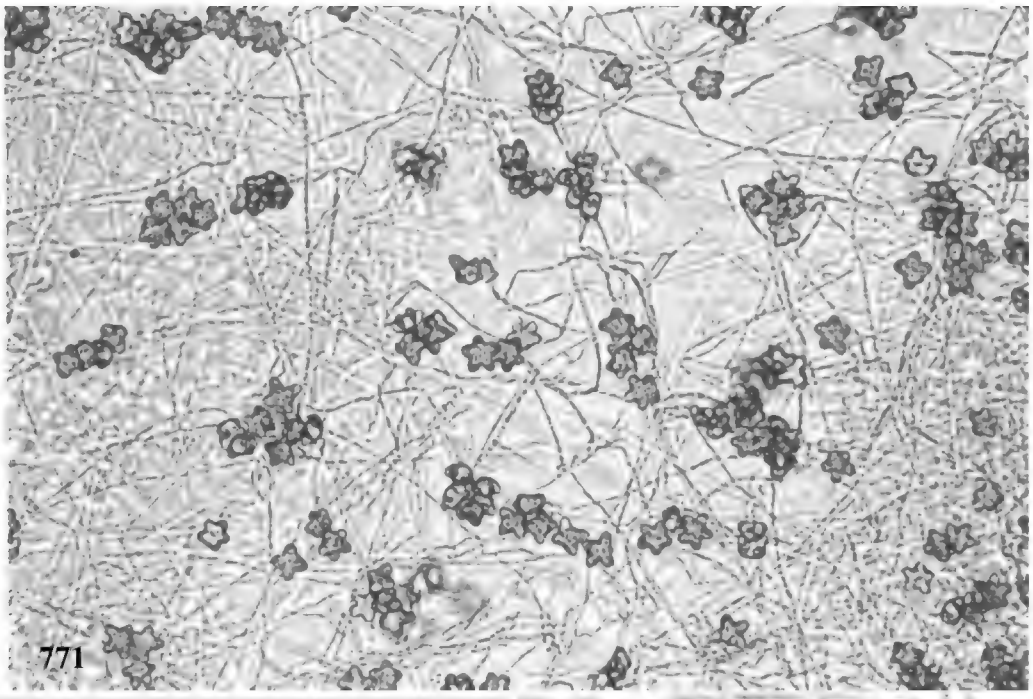

770

1303 ***Polylobatispora quinquecornuta*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Botanical Garden, University of Malaya, Kuala Lumpur, Malaysia; June 10, 1995. **Typus**: CMA cultura exsiccata, MFC-5K174. **Etym.**: *quinque-cornuta* = conidia 5-horned.
DESCR In CMA: Coloniae tarde crescentes, fere immersae, aspectu plus minusve udae, pallide aurantiacae, margine restricta, sporulatione fere in inoculis et circum inocula (e PDA). Hyphis vegetativis ramosis, septatis, delicatis, 0.5-2.0 µm latis, laevibus, hyalinis and subhyalinis. Conidiophora deficientia. Cellulae conidiogenae e hyphis repentibus non-propiis lateraliter et terminaliter oriundae, lageniformes, 3.5-10.0 µm longae, 3.0-4.2 µm latae, laeves, hyalinae, apice monoblasticae vel enteroblasticae-phialidicae, usque ad 3-4 conidiis formantes. Conidia solitaria continua, stellata 4-5-generatim 5-lobis, aspectu apicali 11-15 µm diam. circumscriptionis, 6-7 µm alta aspectu laterali, laevia, pallide olivaceo-brunnea, atro fusca in massa; affixa ad cellulam conidiogenam alicubi (ad centrum vel ad marginem) per pedicellum minutum.
ICO P771: sporulaltion on CMA, x 400.
P772: conidia, x 2000.
P773: conidia, x 1000.
F876: conidiogenous cells and conidia, CMA, x 1000. (in p. 212)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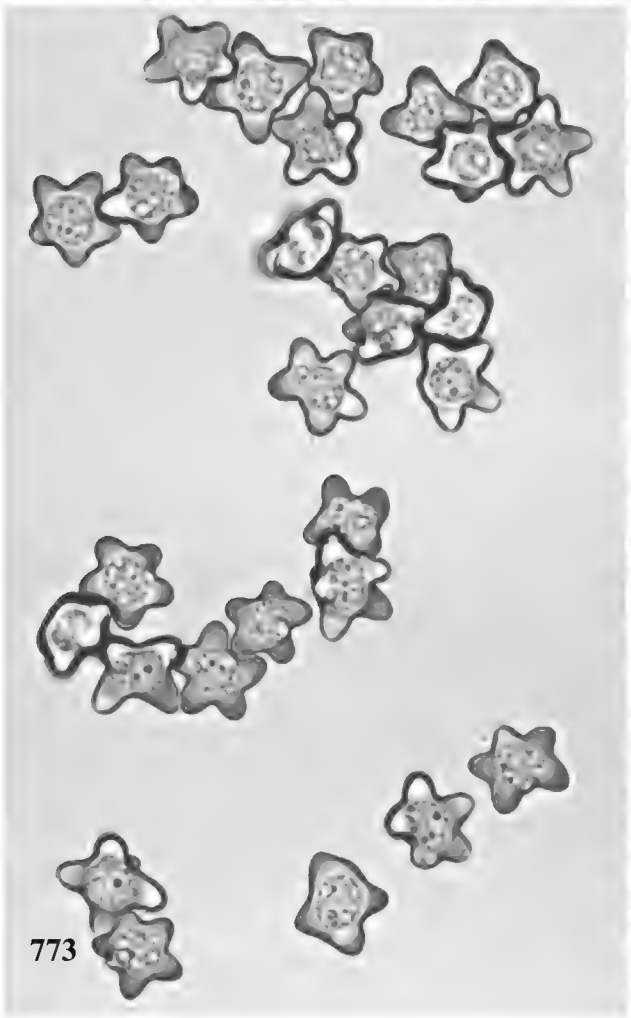
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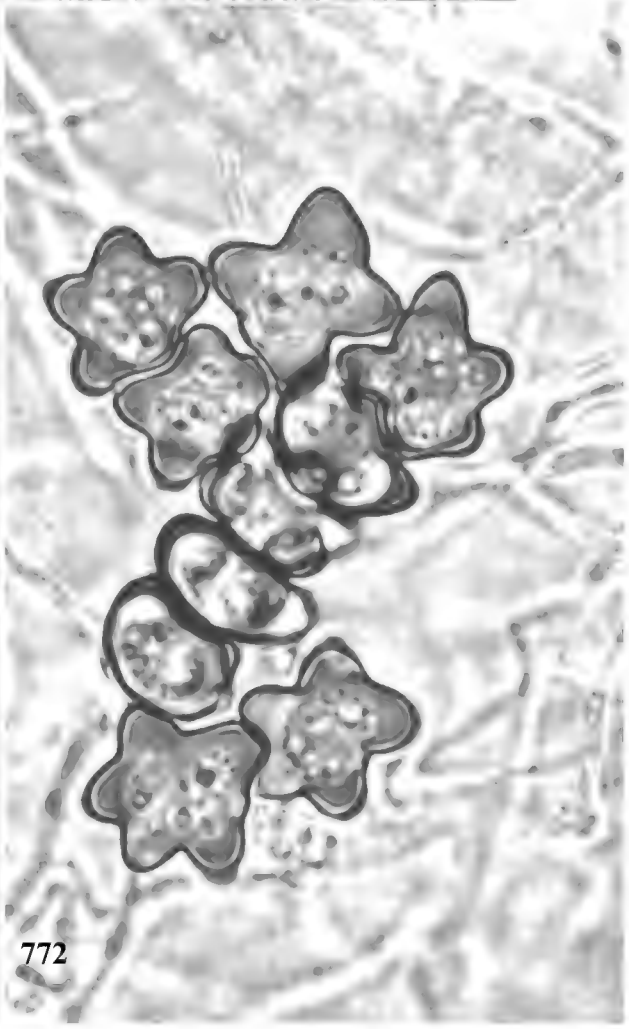

772

Porrectotheca T. Matsushima anam.- gen. nov.

Ad Coelomycetem pertinet.

Conidiomata initio globosa clausa, maturitatem apice refringentia, postremo cupulascentia; peridium porrectum brunneum, ex hyphis parallellis vel parte textura oblita constans; conidiophora peridio intimo dense contigua, repetite ramosa, hyalina; cellulae conidiogenae cylindricae, apice leviter attenuatae uniphialideicae. Conidia continua, cylindrica ad ellipsoidea, laevia, hyalina, mucosa in massa. **Etym.**: *porrecto-theca* = stretched outwards - case; container composed of out-streched hyphal membrane.
Species typica: *Porrectotheca divaricata* T. Matsushima anam.- sp. nov.

1304 ***Porrectothaca divaricata*** T. Matsushima anam.- sp. nov.

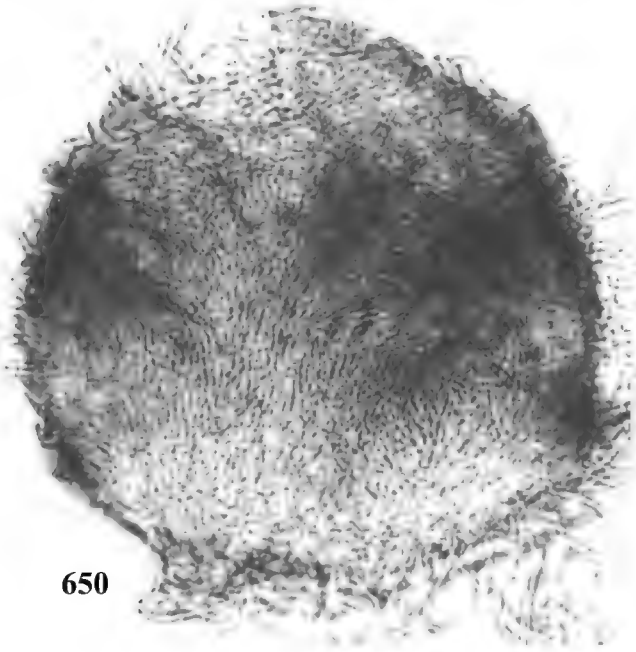
HAB In folio putrescenti arboris latifoliae; Otomizu-keikoku, Hyogo Pref., Japan; Sept. 1995. **Typus**: b/c cultura exsiccata, MFC-5H436. **Etym.**: *divaricata* = branching of conidiophores divaricate.

DESCR In b/c: Colonia effusa, hyphis aeriis albis sparsis. Conidiomata pycnidioidea, dispersa, solitaria vel gregaria, superficialia, initio globosa ad oblonga, basi complanata, apice rotundata, clausa, 75-250 µm in diam., hyphis albidis radiatis non-propiis obtecta, statu maturo refringentia cupulata, postremo platelliformia 150-550 µm in diam.; peridium prosenchymatosum pallide brunneum ad brunnem, ex hyphis parallelis 2.0-3.0 µm latis vel parte textura oblita constans; conidiophora peridio intimo dense contigua, hyalina; submetulae metulae et cellulae conidiogenae plus minusve divaricatae; metulae et submetulae cylindricae, (2.5-)5.0-10.0 x 1.3-2.0 µm, laeves, hyalinae; cellulae conidiogenae cylindricae, apice leviter attenuatae uniphalidicae, 6-13 x 1.3-2.0 µm, laeves, interdum in forma *Sesquicillii*. Conidia cylindro-ellipsoidea, 3.0-6.0 x 1.0-2.0 µm, laevia, cremea mucosa in massa.

In CMA: Colonia plus minusve cito crescens, fere immersa, fere incolorata, hyphis aeriis sparsis, conidiomatibus gregariis fuscis in regione centrali.

MEM For conidiomata formation CMA is better medium than b/c.

ICO P650: a young conidioma, closed (a little open in slide praparation), b/c, x 400.
P651: a mature conidioma, bottom view (gently pressed and conidia washed away), x 200.
P652: the same, x 400.
P653: the same, strongly squashed, showing structure of peridium, x 400.
P654: conidiophores and conidogenous cells from a squashed conidioma, x 1000.
P655: conidia (phase contrast), x 1000.



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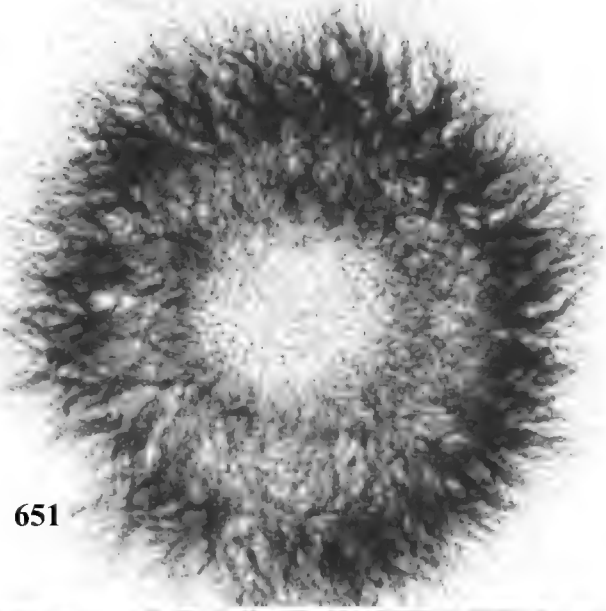

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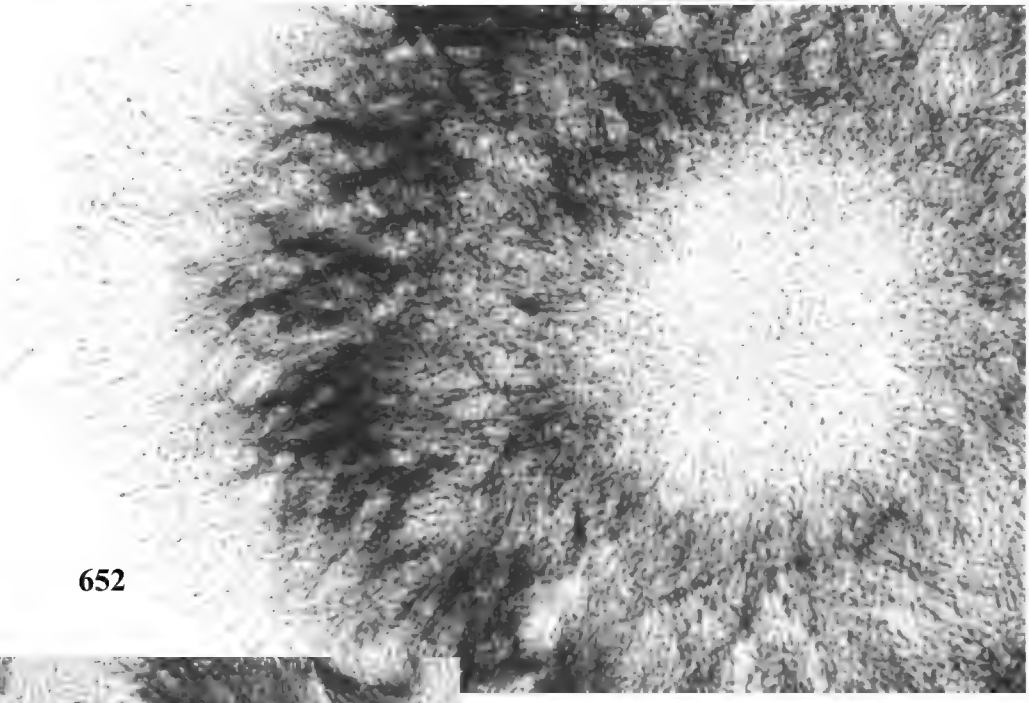

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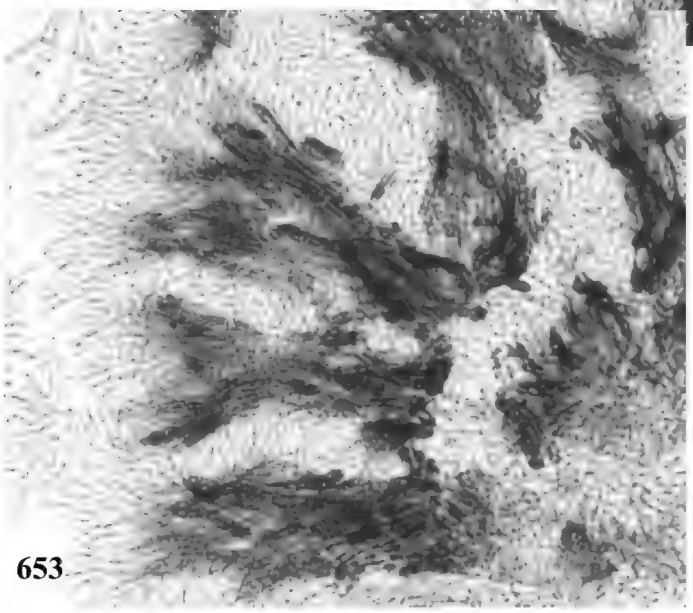

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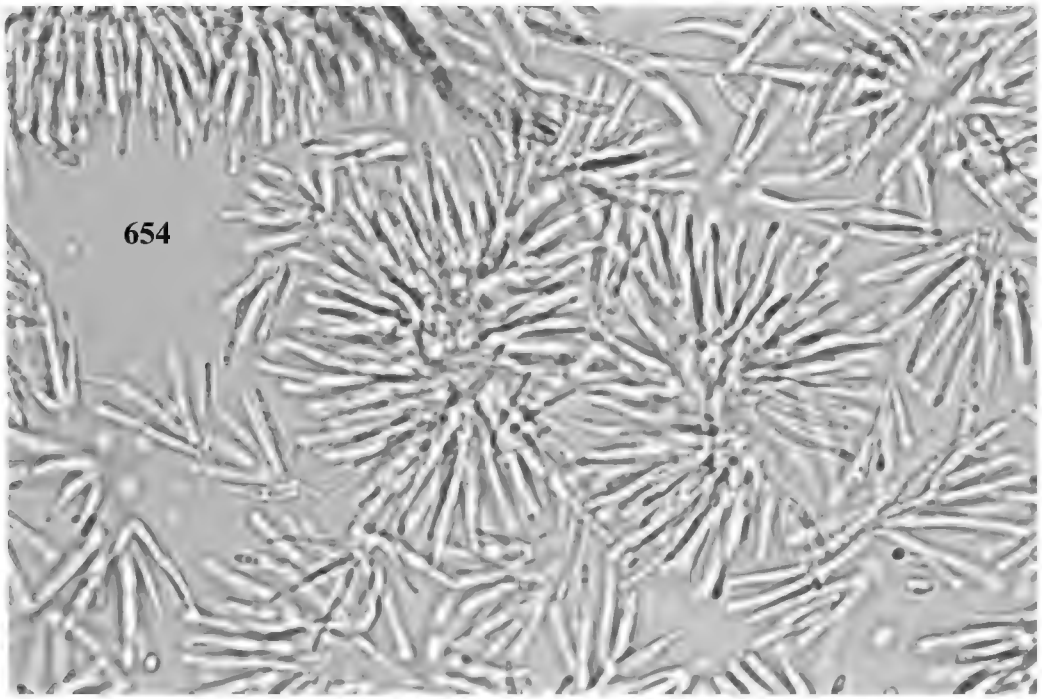
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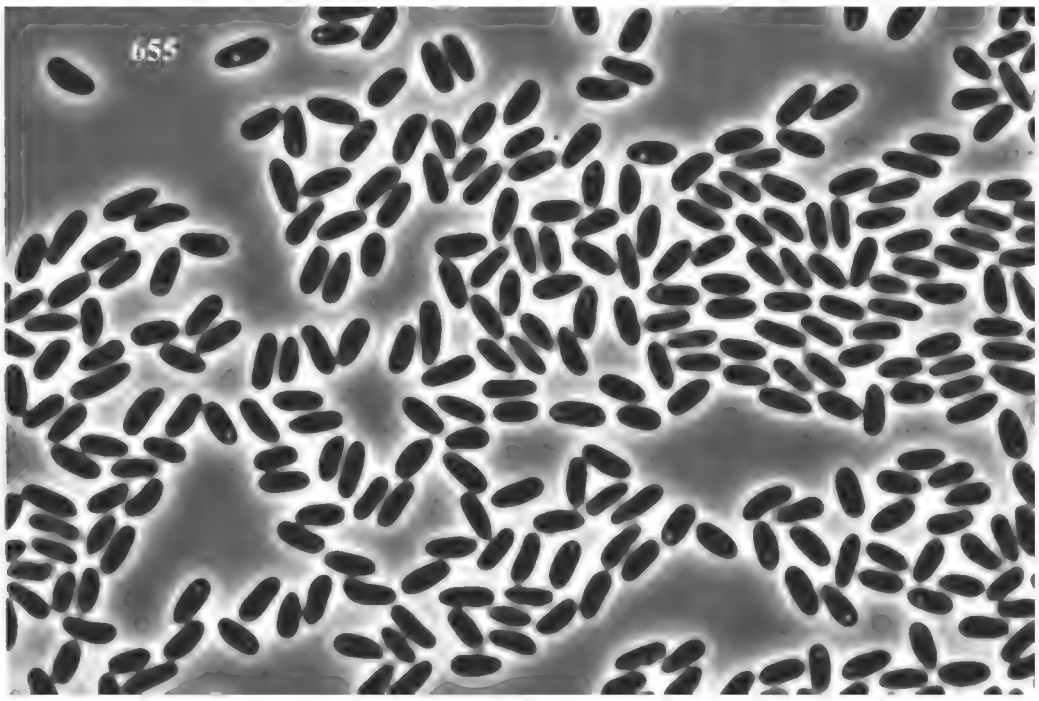

655

1305 ***Pseudaegerita caffera*** T. Matsushima anam.- sp. nov.

HAB In ramunculo mortuo in rivulo; Sparkling Water Hotel, near Rustenburg, South Afrrica; Sept. 21, 1995. **Typus**: CMA cultura exsiccata, MFC-5A125.

DESCR In b/c: Colonia modice effusa, hyphis aeriis sparsis, sub lente olivacea pulveracea a bulbilis abundanter aggregatis. Hyphae vegetativae ramosae, septatae, ad septa non vel leviter constrictae, 1.5-3.5 µm latae, laeves, hyalinae ad pallidissime brunneae. Bulbili forma atque magnitudine variabiles, plus minusve globosi, 300-1000 µm diam., dense aggregati, sicci, olivacei in massa, parte interiore non cavi; ex cellulis multo irregulariter ramosis dense contiguis, globosis laevibus 4.0-6.0 µm diam., blastogene per isthmum catenatis vix separabilibus constantes.

In CMA: Colonia modice crescens, pulveracea olivacea a bulbilis abundanter aggregatis.

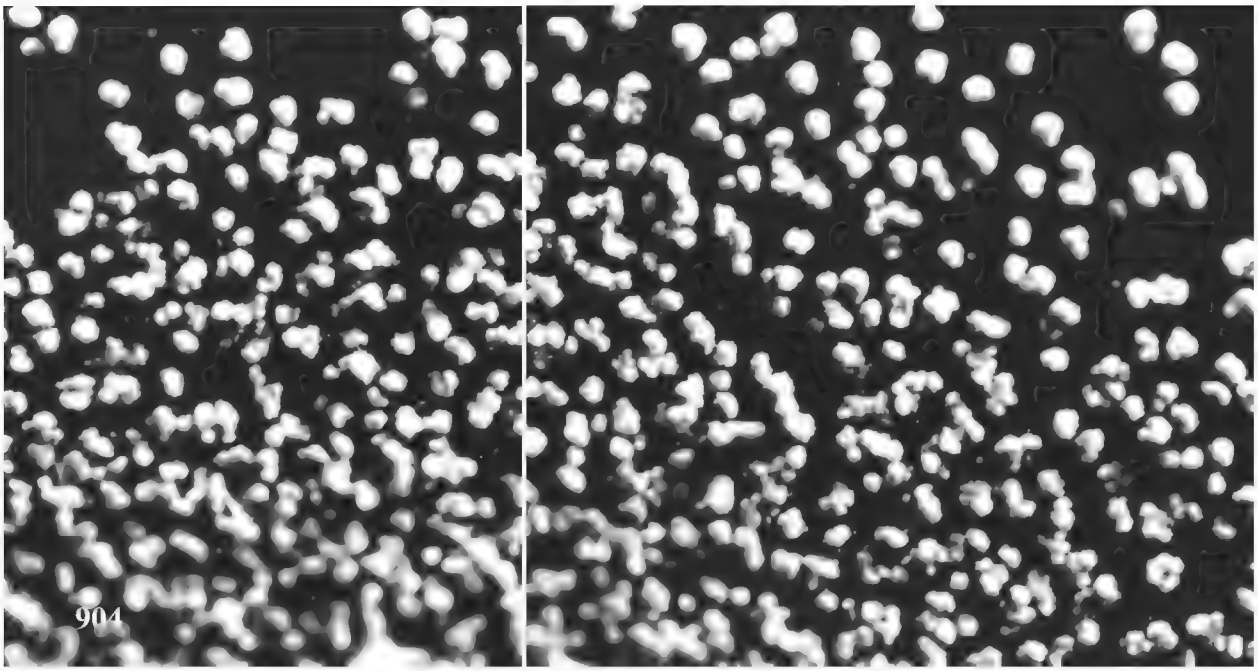
MEM Other species: *Pseudaegerita viridis* (Bayliss Elliot) Abdullah & Webster, in which the component cells of bulbilis ca. 4 µm in diam.; and *Papulaspora viridis* Matsushima (in Icones Microfungorum A Matushima Lectorum, no. 357), in which the component cells of bulbils globose doliiform or irregular, 7-12 µm in diam.

ICO P904: bulbils on CMA, x 40.

P905: bulbils , x 400.

P906, P907, P908: initials of bulbils, x 2000.

P909: a bulbil, strongly squashed, showing component round cells, x 1000.



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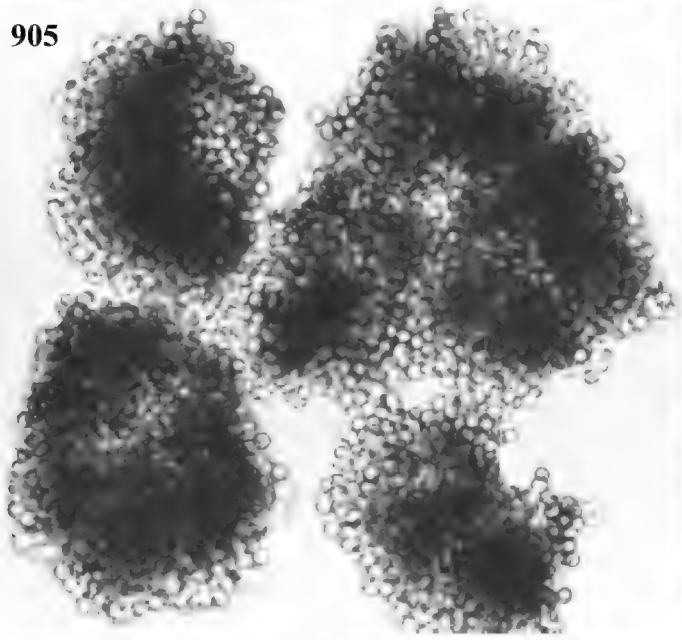

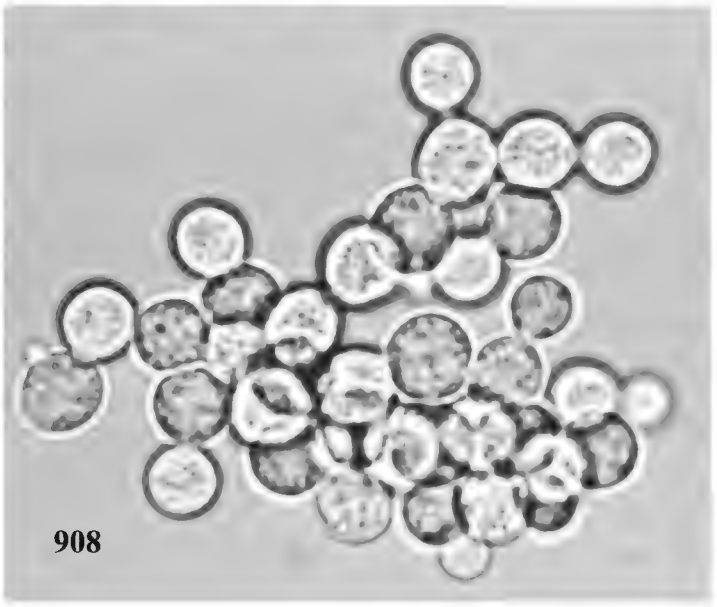

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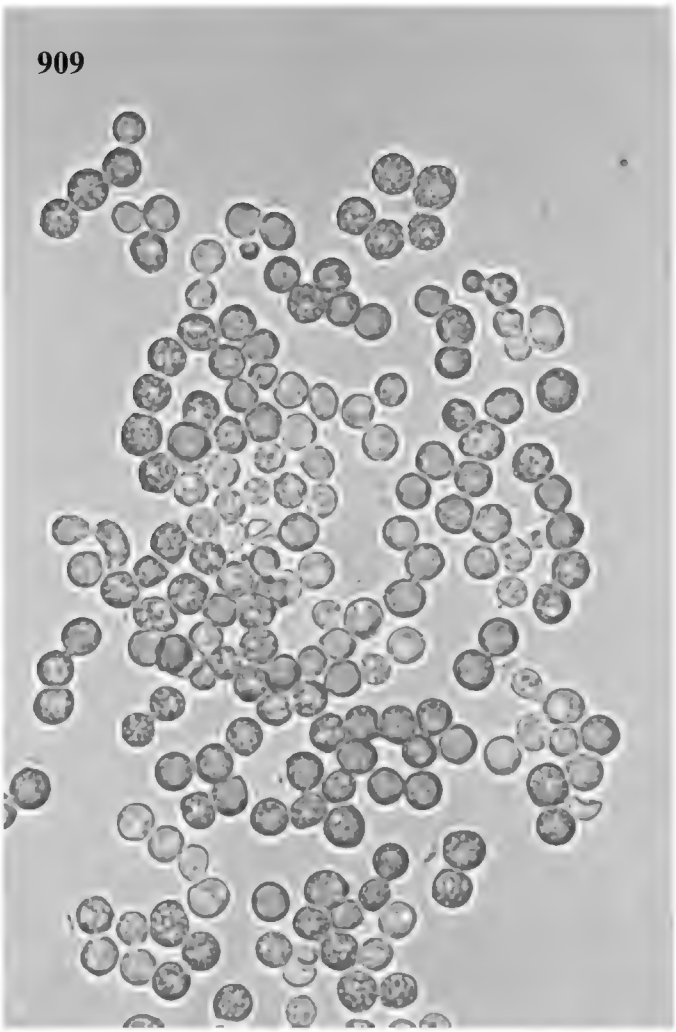
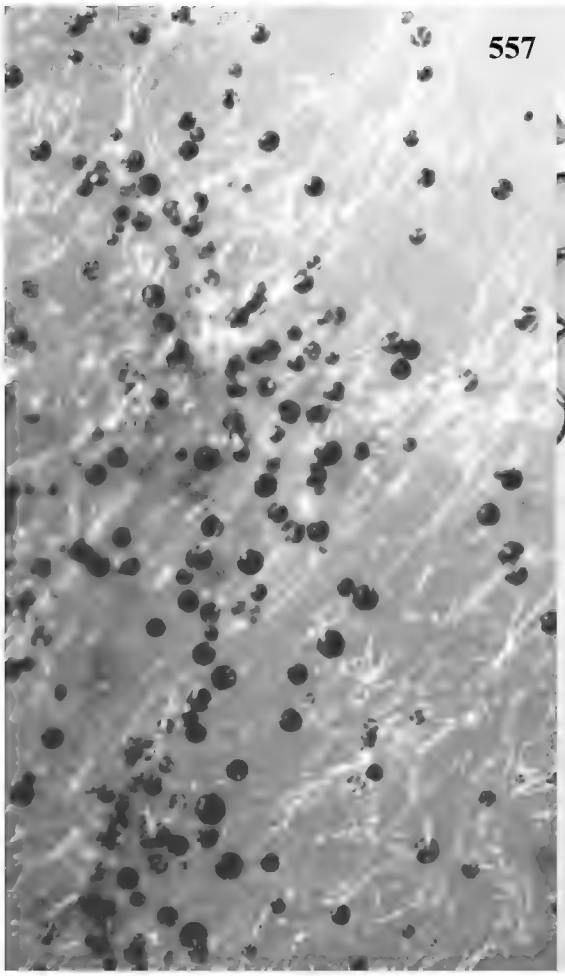


1306 ***Pseudeurotium macroglobosum*** T. Matsushima sp. nov.
HAB Ex solo: Xi-an-shi, China; Aug. 1995. **Typus**: CMA cultura exsiccata, MFC-5M362. **Etym.**: *macro-globosum* = asospores big and globose.
DESCR Species nova differt a *Pseudeurotia zonata* ascosporis magnioribus. In CMA: Colonia plus minusve tarde crescens. Hyphis vegetativis hyalinis, albis in massa. Cleistothecia dispersa, superficialia vel immersa, solitaria vel gregaria, globose, atera, 80-230 µm in diam.; peridium 2-stratis, pariete exteriore cellulis angularibus complanatis pallide brunneis, pariete interiore cellulis hyalinis. Cleistothecia statu perfecte maturo fissa dimidiis. Asci subglobosi vel obovati, 8-spori, maturitatem deliquescentes. Ascosporae perfecte globosae, 4.5-6.0 µm plerumque 5.0-5.5 µm in diam., pagina sine ornamento, hyalinae, pallidissime brunneae in massa. Anamorphosis: Conidiophora micronematosa, simplicia vel ramosa; conidia globosa, 6-7 µm in diam., per pedicellum minutum 2-4 µm longum 0.7-1.5 µm latum formata, laevia, hyalina, sicca.
REF Booth, C. 1961. Mycol. Pap., C.M.I. **83**. => *Pseudeurotium* spp. ** Mouchacca, J. 1971. Rev. Mycol. **36**: 123-127. => *Pseudeurotium desertorum* sp. nov.: ascospores globose 5.2-7.2 (-8.4) µm, the mean 6.1 µm in diam., brown at maturity.
ICO P557: cleistothecia on CMA, x 40.
P558: ascospores, x 2000.
P559: a squashed cleistothecium, x 200.
P560: peridium in surface view, x 1000.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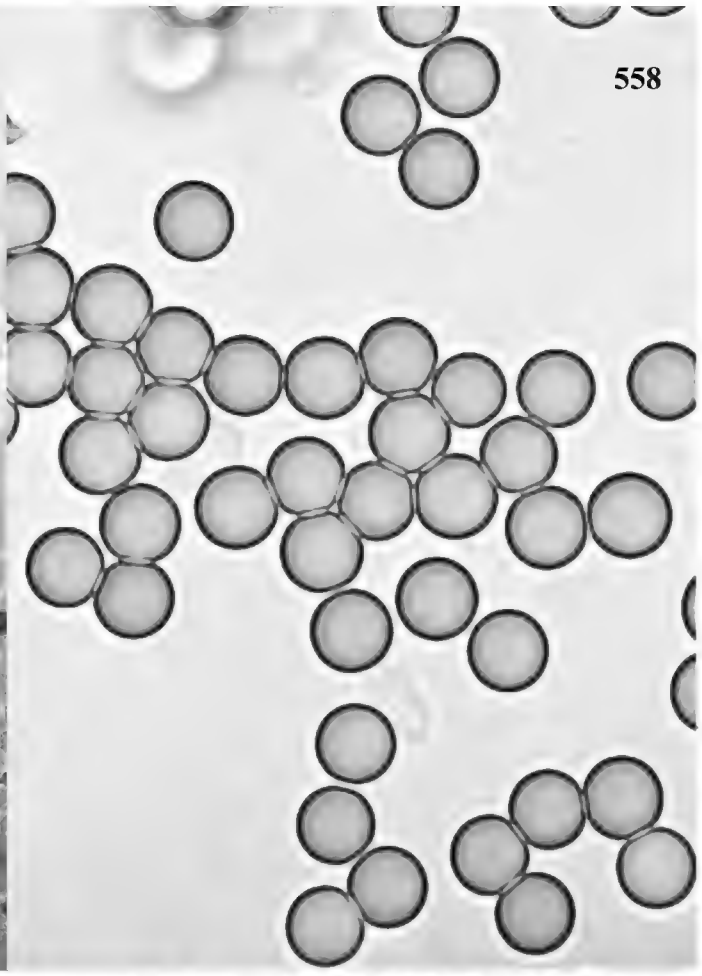
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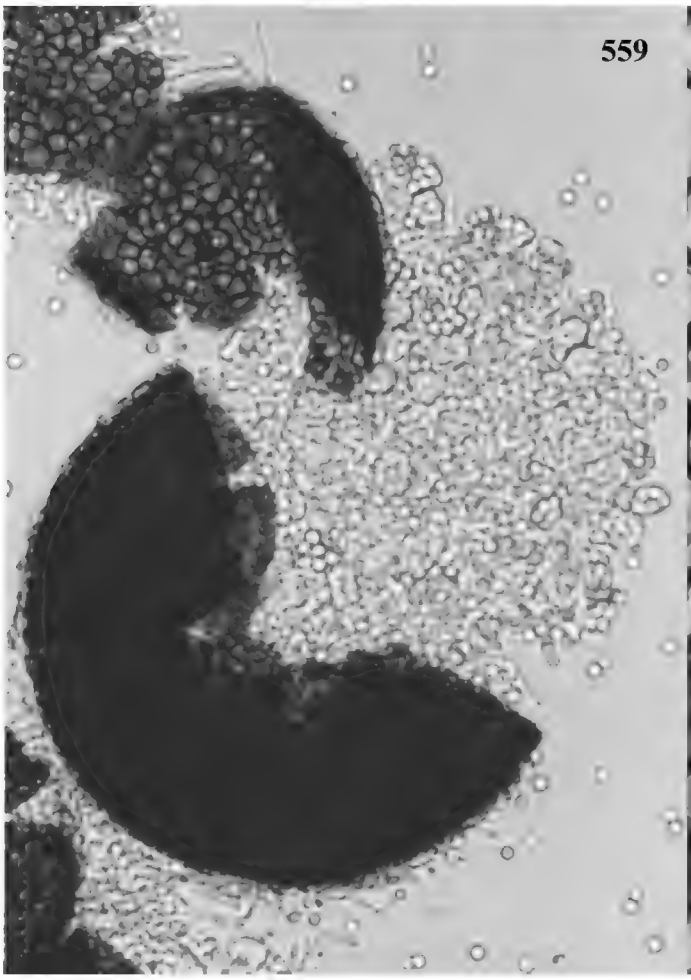
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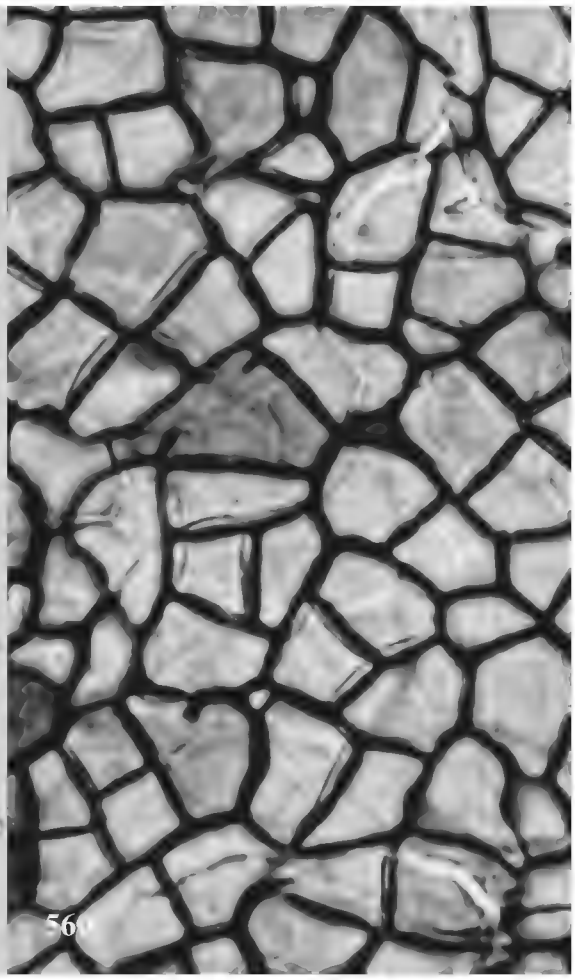
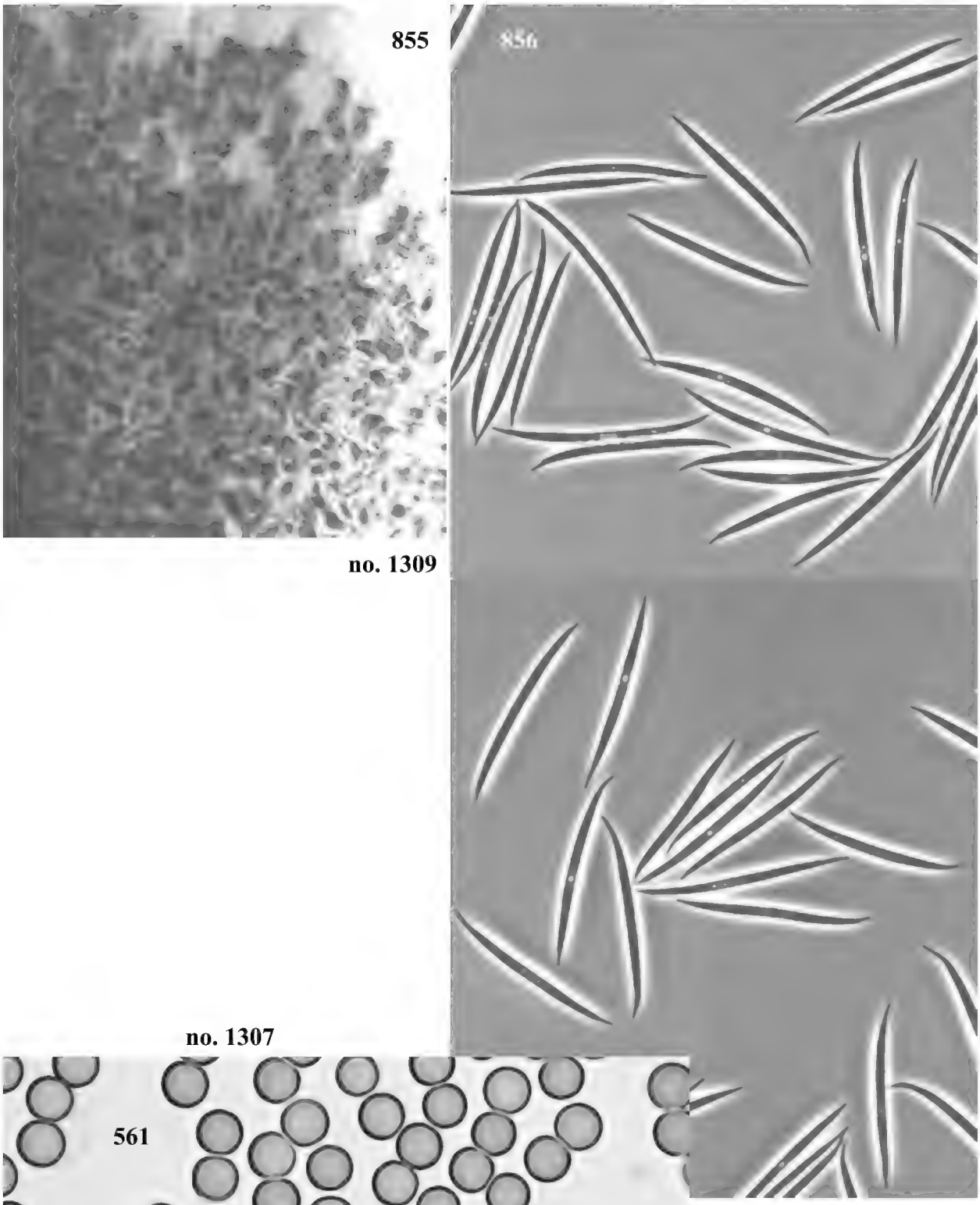

560

1307 ***Pseudeurotium zonatum*** van Beyma, Zbl. Bakt., Abt.2, **96**: 416. 1937.
HAB From soil; Haga-cho, Hyogo Pref., Japan; Sept. 1995. MFC-5M404.
DESCR On CMA: Cleistothecia densely and evenly distributed on and in the agar, globose, 60-185 µm in diam., dark brownish gray. Ascospores perfectly globose, 3.5-4.0 µm in diam., without surface ornamentation, plae brownish gray, brownish gray in mass. Anamorphosis: Inconspicuous, assignable to *Sporothrix*.
REF Booth, C. 1961. Mycol. Pap. **83**: 11. => *P. zonatum*: ascospores 3-3.3 µm in diam. ** Udagawa, S. 1965. Trans. mycol. Soc. Japan **6**: 78-90. Notes on some Japanese ascomycetes II. => *P. zonatum*: ascospores globose 3.0-3.5 µm in diam. ** Batra, L. R. 1975. Biologia **21**: 1-37. Ascomycetes of Pakistan: Plectomycetes. => *P. zonatum*: ascospores globose, 3.3-5.0 µm in diam.
ICO P561: ascospores, CMA, x 2000.

1308 ***Pseudodictyosporium wauense*** T. Matsushima, Microfungi of the Solomon Islands and Papua - New Guinea, p. 46.
HAB In folio mortuo sicca; prope Magoebaskloof Hotel, prope Tzaneen, South Africa; Sept. 26, 1995. MFC-5A220.
REF T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 119. ** Mats. Myc. Mem. **5**, no. 522. 1987. ** Mats. Myc. Mem. **7**, no. 949. 1993.

1309 ***Pseudomicrodochium cafferum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo in rivulo; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. **Typus**: CMA cultura exsiccata, MFC-5A167.
DESCR In CMA: Colonia modice crescens, regione centrali fertili udi pallidissime brunnei, circumferntia lata effusa fere immersa. Conidiomata pseudopionnotes, superficialia, dense dispersa, uda, incolorata. Conidiophora dense ex stromate prosenchymatoso oriunda, brevia, simplicia vel parce ramosa. Cellulae condiogenae in conidiophoris terminaliter integratae vel ex stromate directe oriundae, cylindricae, rectae vel curvae, 5-10 x 3.0-4.0 µm, laeves, apice angustatae, enteroblasticae-phialidicae, ore intrinsecus incrassato, interdum apice furcatae bi-phialidicae vel interdum percurrentes-polyphialidicae collo intrincscus intermittenter incrssato. Conidia arcuata, medio 1-septata, 30-40 µm longa, circa medium 1.5-2.0 µm lata, laevia, hyalina mucosa in massa.
MEM The present species has some similarity to *Pseudomicrodochium aciculare* Sutton, the type species (in Trans. Br. mycol. Soc. **64**: 418. 1975).
REF Sutton, B. C. 1975. Trans. Br. mycol. Soc. **64**: 405-426. => *Pseudomicrodochium* gen. nov.
ICO P855: pseudopionnotes on CMA, x 40.
P856: conidia, CMA, x 1000 (phase contrast).
F882: fragments of conidiomata, CMA, x 1000. (in p. 213)

1310 ***Pseudospiropes simples*** (Kenze ex Pers.) M. B. Ellis, 1971. Dematiaceous Hyphomycetes, p. 260.
HAB On a rotten twig; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A251.
REF T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 120. ** Mats. Myc. Mem. **5**, no. 528. 1987. ** Mats. Myc. Mem. **7**, no. 954. 1993.


855
856
no. 1309
no. 1307
561

Pycnoharknessia T. Matsushima anam.- gen. nov.

Ad Coelomycetem pertinet.

Pycnidia dispersa, subepidermalia, globosa; initio clausa, postea refringentia postremo cupulascentia, ad basim stromate fertili praedita; peridium tenue membranaceum, uni-stratum ex cellulis complanatis pallide brunnis, semi-translucentibus (condia per peridium visibilia) compositum; stroma convexum pulvinatum, pseudoparenchymatosum, pallide brunneum, cellulis conidiogenis obstectum; cellulae conidiogenae lageniformes, apice collo angusto poly-annellato poly-strato (plus minusve similii *Conioscypham* Hoehnel). Conidia continua, mitriformia, laevia, brunnea, rima longitudinali inconspicua, basi vestigio cellulae conidiogenae tubulati hyalino, atro-fusca mucosa in massa. **Etym**.: *pycno-Harknessia* = conidiomata *Harknessia*-like pycnidia. **Species typica**: *Pycnoharknessia pakistanica* T. Matsushima anam.- sp. nov.

MEM The generic description of *Harknessia* Cooke (apud M. C. Cooke & H. W. Harkness, Grevillea **9**: 81-87. 1881. p. 85) is as follow: "Perithecia vera nulla. Sporae ellipticae vel subglobosae, simplicia, opaca, deorsum pedicula hyalina producta, in nucleum conglutinata, demum in cirrhos atros erumpentia. Allied probably to *Melanconium.*"

1311 ***Pycnoharknessia pakistanica*** T. Matsushima anam.- sp. nov.

HAB Ex solo culto; Kaghan, Pakistan; Aug. 1990. **Typus**: b/c cultura exsiccata, MFC-1P295.

DESCR In b/c: Colonia effusa, fere sine hyphis aeriis, pycnidiis ateris dispersis. Pycnidia superficialia, globosa 120-250 µm in diam., atera, nuda, ad basim stromate convexo fertili praedita; initio clausa, postea refringentia, postremo cupulascentia; peridium membranaceum, uni-stratunm, ex cellulis complanatis pallide brunneis, semi-translucentibus (conidia per peridium visibilia) compositum; stroma pulvinatum, pseudoparenchymatosum, pallide brunneum, cellulis conidiogenis obtrctum; cellulae conidiogenae elongate ampulliformes, 10-15 µm longae, parte inferiore 2.5-3.5 µm latae, collo angusto poly-annellato atque poly-strato (plus minusve simili *Conioscypham* Hoehnel), laeves, hyalinae. Conidia continua, mitriformia, laevia, brunnea, 8-12 x 4.5-7.5 µm, apice apiculata, basi anguste truncata 1.0-1.5 µm lata, rima longitudinali inconspicua, ad basim vestigio cellulae conidiogenae tubulari hyalino 4-8 mm longo praedita, atro-fusca mucosa in massa.

In CMA: Colonia cito effusa, fere immersa, incolorata, hyphis aeriis hyalinis sparsis, pycnidiis dense dispersis. Hyphae vegetativae ramosae septatae hyalinae, albae in massa. Pycnidia superficialia, subglobosa ad conica, dense solitarie dispersa, 125-325 µm in diam., fere nuda, atro-fusca.

ICO P760: conidiomata on b/c, x 40.

P761: a pycnidium, gently squashed, the contents washed away, CMA, x 200.

P762, P765: peridium in surface view, x 1000.

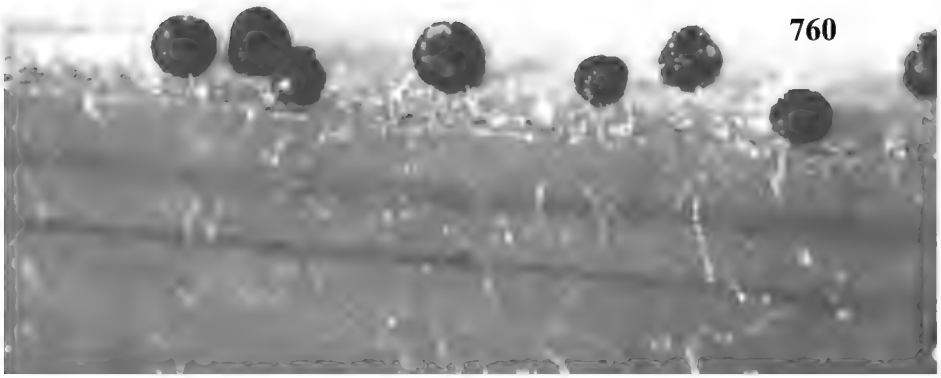
P763, P764: cut-fragments of pycnidia, showing basal fertile stroma, x 400.

P766: conidiogenous cells, x 1000.

P767: conidia, x 1000.

P768: conidia, showing basal appendage, x 1000 (phase cntrast).

760



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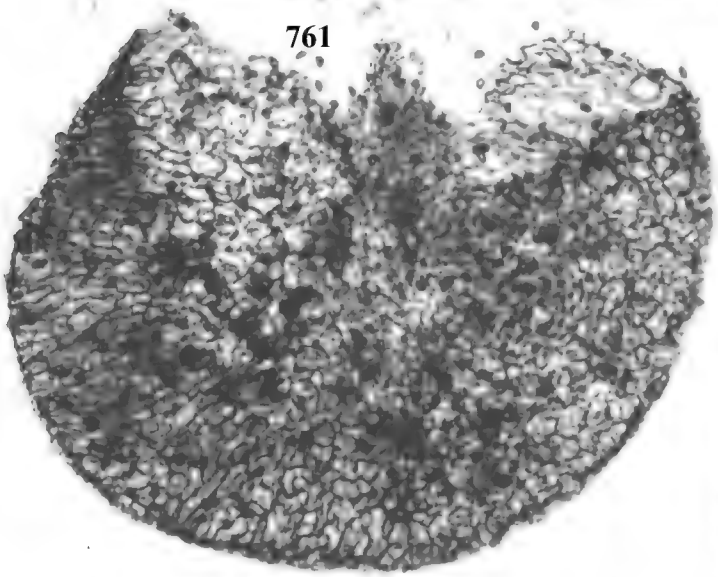

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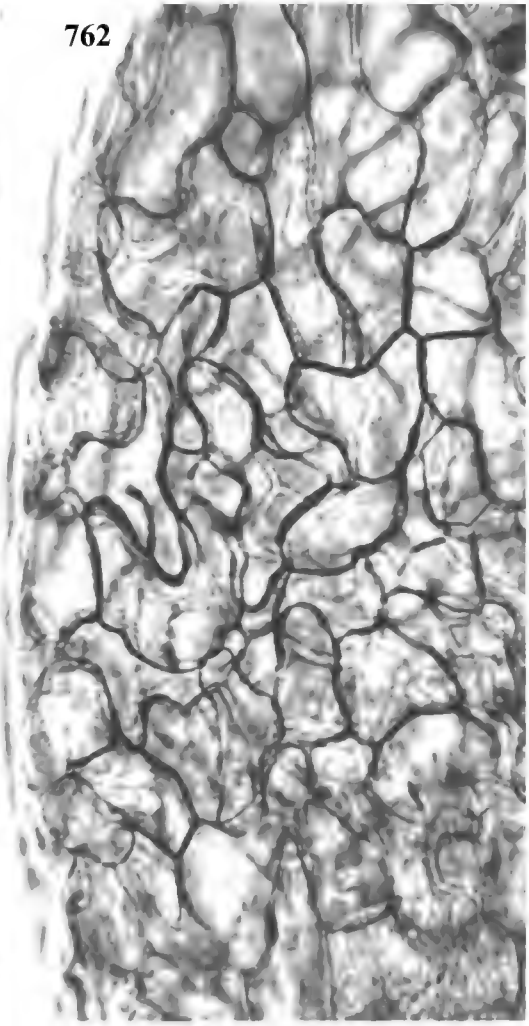

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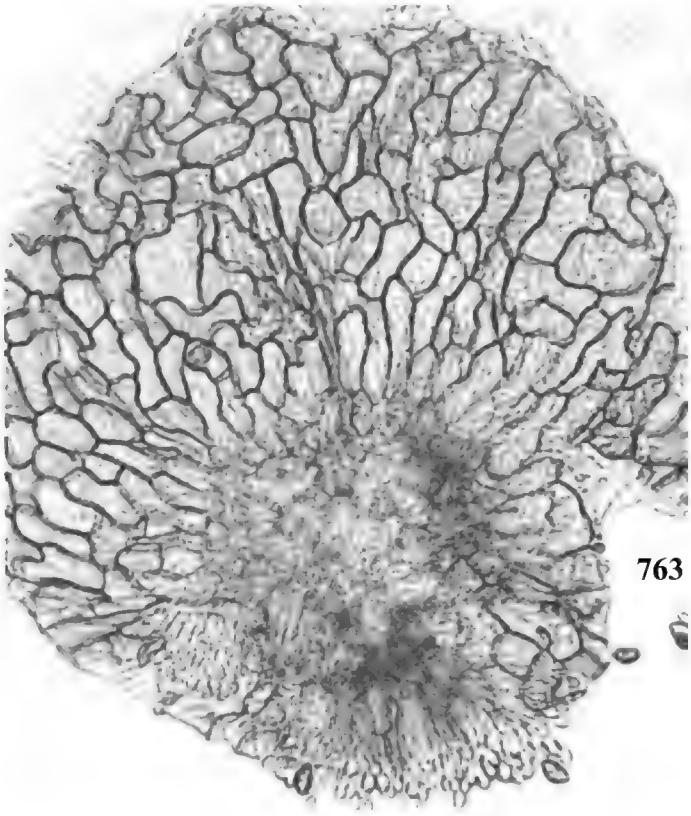

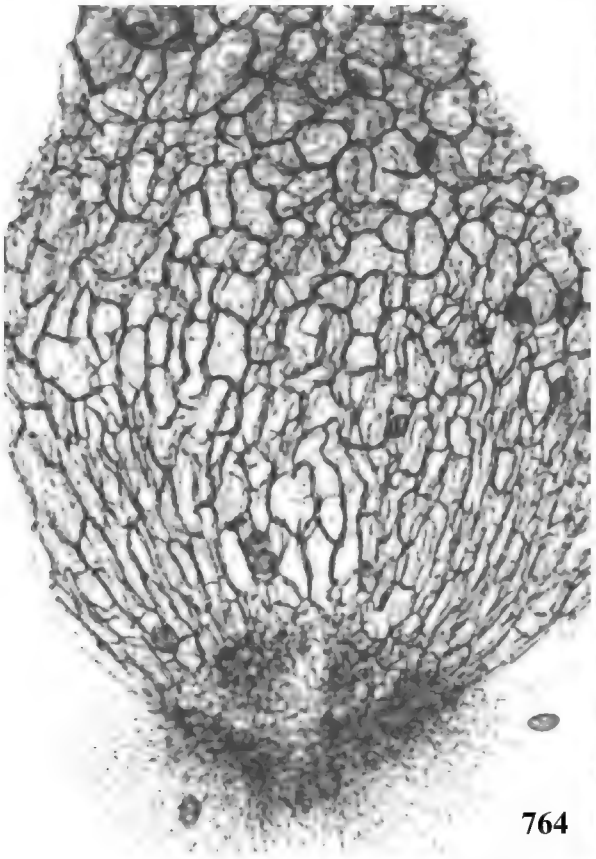

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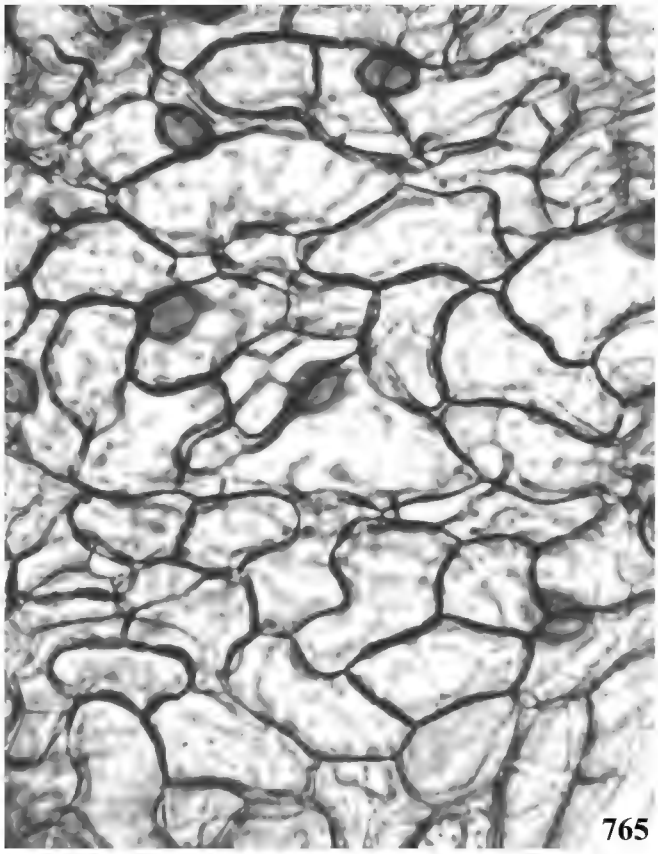

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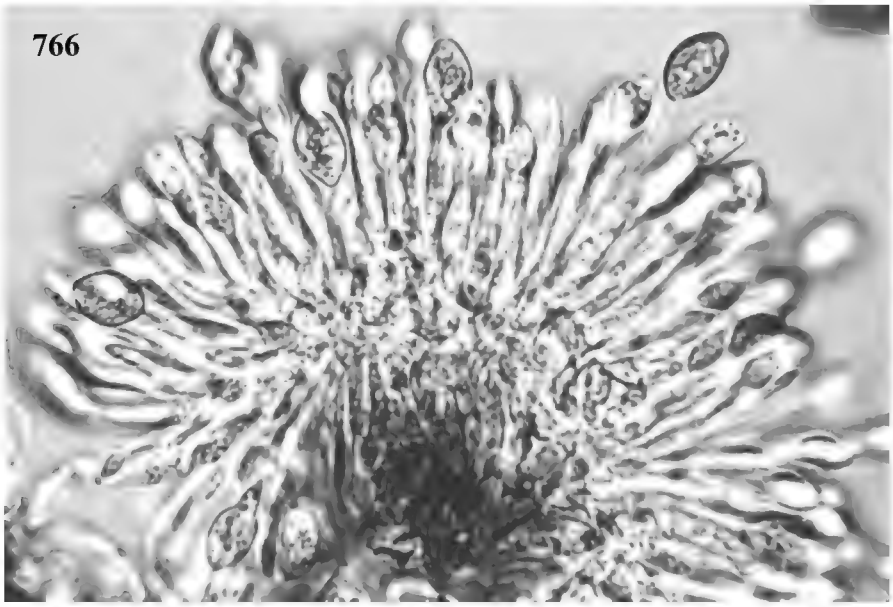

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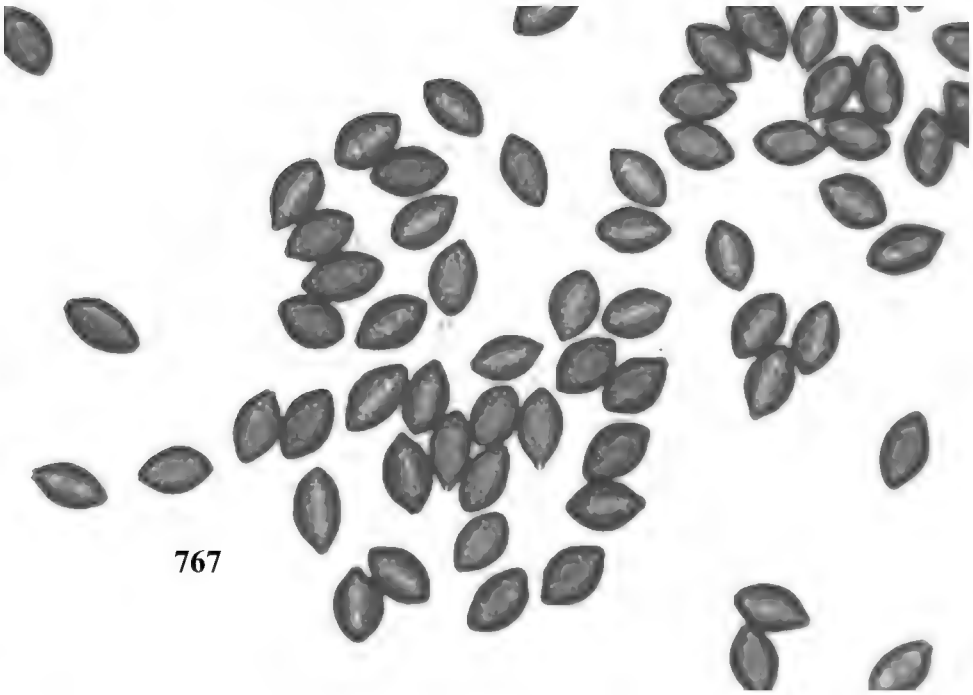

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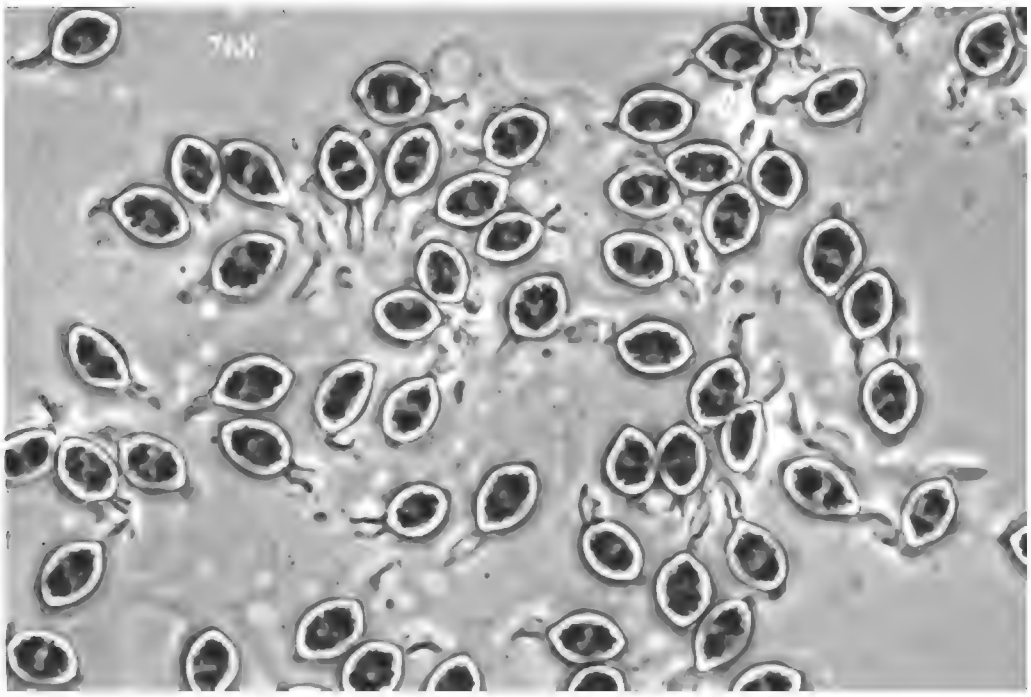
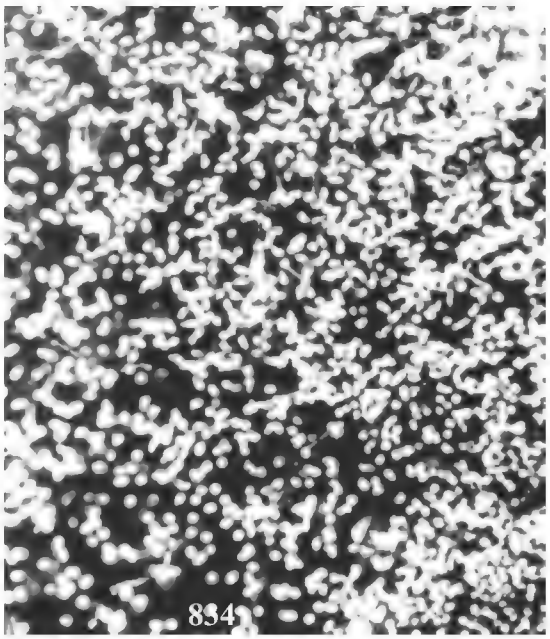


1312 ***Pyricularia caffera*** T. Matsushima anam.- sp. nov.
HAB In folio mortuo *Aceris* sp. in rivulo; prope Sparkling Water Hotel, prope Rustenburg, South Africa; Sept. 21, 1995. **Typu**s: b/c cultura exsiccata, MFC-5A128.
DESCR In b/c: Colonia effusa. Conidiophora macronematosa, mononematosa, erecta, simplicia, 45-100 (-175) µm longa, pauci-septata, basi cellula radiatim lobata brunnea, supra basim 5.0-6.0 µm lata, sursum ad 3.0-3.5 µm atenuata, laevia, pallide brunnea; supra parte conidiifera (cellulae conidiogenae) longitudinaliter proliferata, non vel pauci-septata, cicatricosa flexuosa, 2.5-3.5 µm lata, laevia, pallide brunnea. Conidia solitaria, anguste ovata basi protrudentia, 1-septata, 20-31.5 x 6.0-9.5 µm, laevia, cellula inferiore pallide brunnea, cellula superiore pallidissime brunnea. Teleomorphosis ignota.

In CMA: Colonia cito effusa, tenuis, pallide grisea. Conidiophora basi frequenter subglobose inflata.
MEM Known *Pyricularia* (and some similar *Dactylaria*) species with 1-septate conidia are: *Pyricularia didyma* M. B. Ellis, Mycol. Pap., C.M.I. **125**: 9-10.1971. / *P. vandalurensis* Subramanian & Vittal in Proc. Ind. Acad. Sci. **80**, **B**: 216-221 & 1 pl. 1974. / *Dactylaria junci* M. B. Ellis in More Dematiaceous Hyphomycetes, 1976. p. 172. / *Dactylaria madrascensis* Matsushima, in Mats. Myc. Mem.**3**, no. 336, Fig. 172. 1983.
ICO P837: conidia, b/c, x 1000. (See page 158)
F863: upper parts of conidiophores, b/c, x 1000. (in p. 209)
F864: basal parts of conidiophores, b/c, x 1000. (in p. 209)
F865: basal parts of conidiophores, CMA, x 1000. (in p. 209)

1313 ***Ramichloridium basifuscatum*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti arboris latifoliae; Botanical Garden, University of Malaya, Kuala Lumpur, Malaysia; June 10, 1995. **Typus**: b/c cultura exsiccata, MFC-5T163. **Etym.**: *basi-fuscatum* = conidia having dark colored base.
DESCR In b/c: Colonia modice crescens, grisea, fertilis, circumferentia lata submersa hyalina. Hyphis vegetativis fere hyalinis. Conidiophora macronematosa, mononematosa, dense erecta, simplica, septata, (140-)175-250 µm longa, parte inferiore sterili 45-100 µm longa 3-4 µm lata, parte superiore fertili sympodialiter proliferata, 2.5-3 µm lata inconspicue cicatricosa leviter sinuolata, laevia, inferne brunnea apicem versus pallide brunnea. Cellulae conidiogenae terminaliter in conidiophoris integratae, postea a proliferatione intercalarescentes. Conidia solitaria, continua, ellipsoidea, (7.5-)9.5-13 x 4-5 µm, laevia, contento guttulato, sicca, pallide fusca, basi anguste truncata atrofusca. Chlamydosporae ignotae. Synanamorphosis ignota. Teleomorphosis ignota.
MEM The distinguishable feature of this species is that the conidia have dark fuscous truncate base.
REF De Hoog, G. S. 1977. Stud. Mycol. **15**. => *Ramichloridium* Stahel ex de Hoog.
ICO P834: sporulation on CMA, x 40.
P835: conidiophores, x 1000.
P836: conidia, x 1000.

837
For no. 1312



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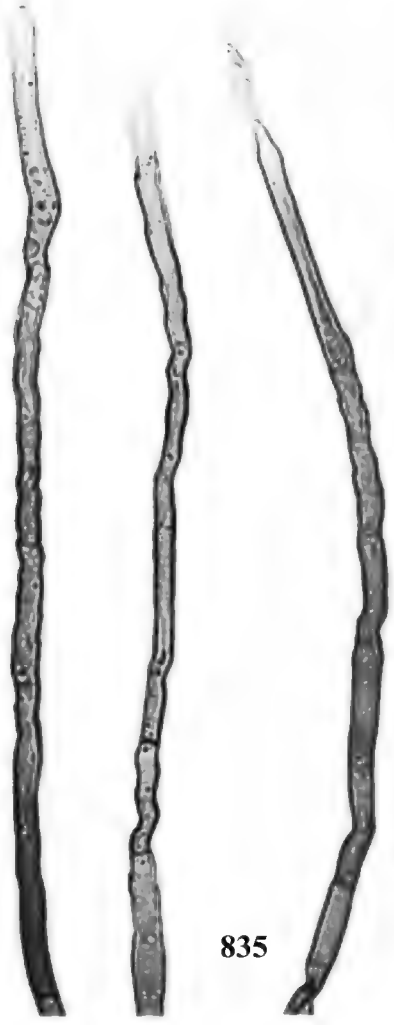

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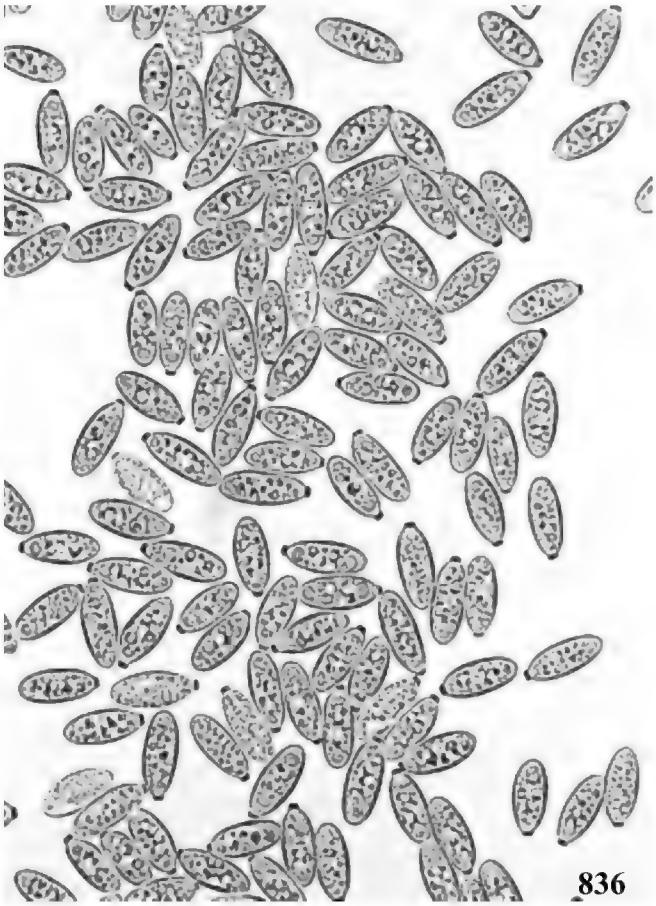


836

Rhexoprolifer T. Matsushima anam.- gen. nov.

Ad Hyphomycetem pertinet.

Conidiophora mononematosa, macronematosa, erecta, simplicia, septate, brunnea, apice angustata uni-blastica, tum sympodialiter vel percurrenter proliferata. Conidia longa, forma atque magnitudine variabilia, septis transversaribus vel obliquis praedita, pallide brunnea, basi vestigio cellulae conidiogenae ferentia, conidia mode rhexolytico liberata. **Etym.**: *rhexo-prolifer* = conidial liberation rhexolytic, and conidiophores proliferating. **Species typica**: *Rhexoprolifer variabilis* T. Matsushima anam.- sp. nov.

1314 ***Rhexoprolifer variabilis*** T. Matsushima anam.- sp. nov.

HAB In ramunculo putrescenti in rivulo; Duiwelskloof, prope Tzaneen, South Africa; Sept. 27, 1995. **Typus**: CMA cultura exsiccata, MFC-5A179. **Etym.**: *variabilis* = conidia both phragmosporous and dictyosporous.

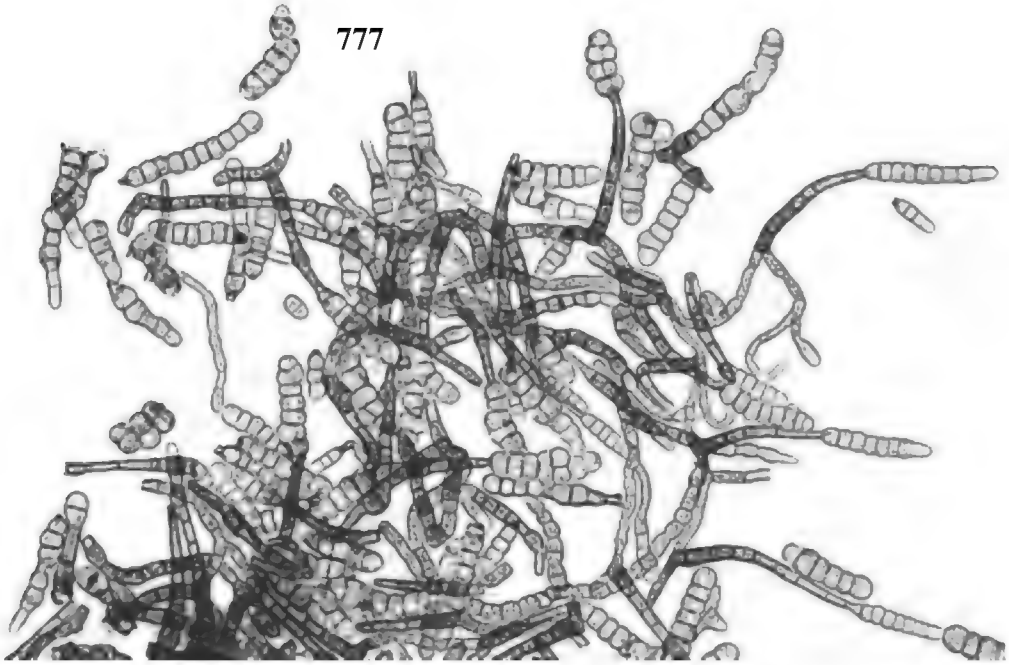
DESCR In CMA: Colonia tardissime crescens, atro-fusca, margine restricta. Conidiophora mononematosa, macronematosa, dense dispersa, ex hyphis vegetativis repentibus perpendiculariter erecta, simplica, subulata, 20-50 µm longa, 1-5-septata, supra basim 4-6 µm lata, sursum ad 1.5-2.0 µm angustata, laevia, brunnea, apice uni-blastica, tum sympodialiter vel percurrenter usque ad 3-polo proliferata, longitudine tota 95 µm attingentia. Conidia forma atque magnitudine variabilia, plus minusve cylindro-obclavata, 4-12 septis transversalibus et non vel aliquot septis longitudinalibus vel obliquis praedita, ad septa leviter constricta, 24-75 µm longa, 6-8 µm lata, parte subapicali 4-5.5 µm lata, laevia, pallide brunnea, basi collo brevi fuscato (= apicali parte cellulae conidiogenae) ferentia; conidia modo rhexolytico liberata. Teleomorphosis ignota.

ICO P777: conidiophores and conidia, on CMA, x 400.

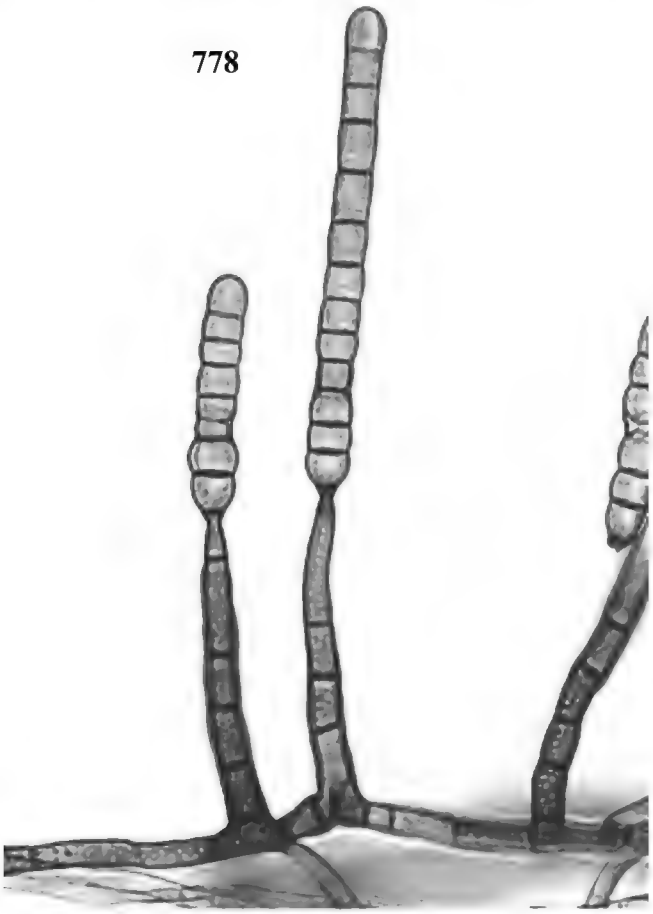
P778: conidiophores and conidia, x 1000.

F857: conidiophores, conidiogenous cells and conidia, arrows indicating the loci of conidial secession, on CMA, x 1000. (in p. 207)

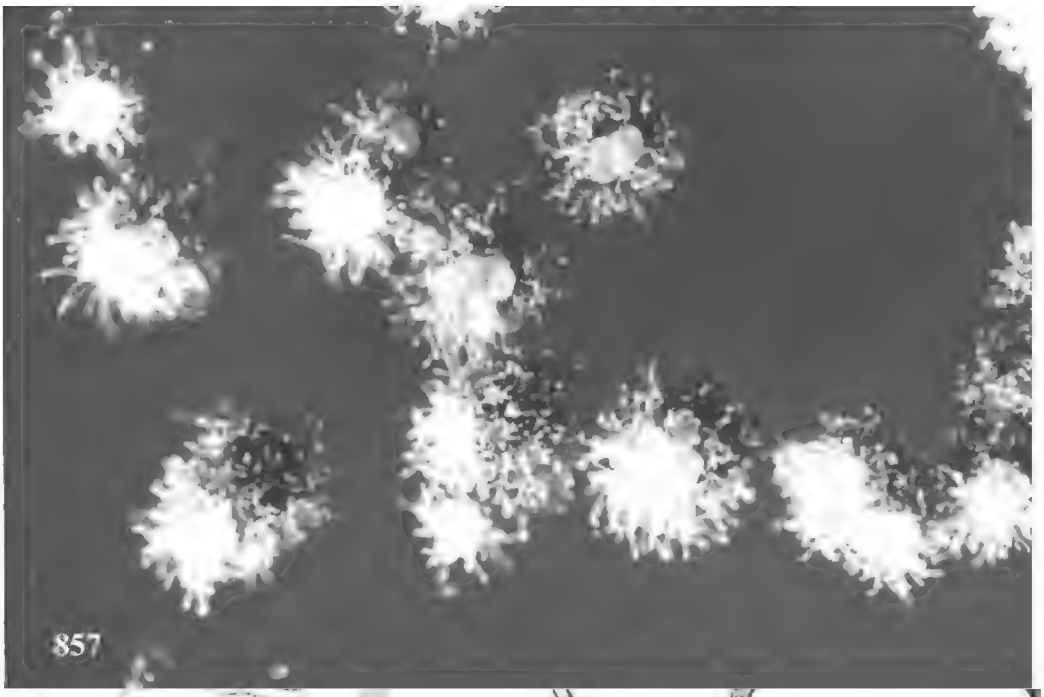
777



778



1315 ***Sarcopodium circinosetiferum*** (T. Matsushima) T. Matsushima comb. nov.
= = *Kutilakesa circinosetifera* Matsushima, in Microfungi of the Solomon Islands and Papua-New Guinea, p. 34, Pl. 27, 1-5.
HAB On a decaying broad-leaved tree leaf; Botanical Garden, Univerity of Malaya, Kuala Lumpur, Malaysia; June 10, 1995. MFC-5K238.
DESCR In b/c et in CMA: Colonia effusa, mycelio aerio albo sparso. Sporodochia dispersa superficialia sessilia pulvinata setifera. Setae supra circinatim convolutae 2.5-3.5 µm latae septatae verruculosae modice brunneae, parte inferna conidiophoris mixtae, rectae, subhyalinae ad pallide brunneae. Conidiophora ex stromate basali oriunda, dense contigua, repetite ramosa, laevia, incolorata, in fasiculis cellularum conidiogenarum terminata. Cellulae conidiogenae cylindricae, apice non vel leviter angustatae, 5-10 x 2-2.5 µm, laeves, hyalinae, apice enteroblasticae-phialidicae, ore intrinsecus incrassato. Conidia continua, oblonga, laevia, 4-6.5 x 2-3 µm, pallide luteo-aurantiaca mucosa in massa. Teleomorphosis: peritheciorum primordia (? *Nerctria* sp.) globosa auraqntiaca producta, haud matura.
MEM *Sarcopodium synnemaferum* T. Matsushima (in Mats. Myc. Mem. **8**, no. 1217. 1995) is considered as a synnematous counterpart of *Sarcopodium circinosetiferum.*
REF Alfieri, S. A., & G. J. Samuels. 1979. Mycotaxon **71**: 1178-1185. => *Nectriella pironii* has *Sarcopodium*-anamorph. ** Sutton, B. C. 1981. Trans. Br. mycol. Soc. **76**: 97-102. => *Sarcopodium* and its synonyms.
ICO P857: sporodochia on CMA, x 40.
P858: setae, x 1000.
P859: conidia, x 1000 (phase contrast).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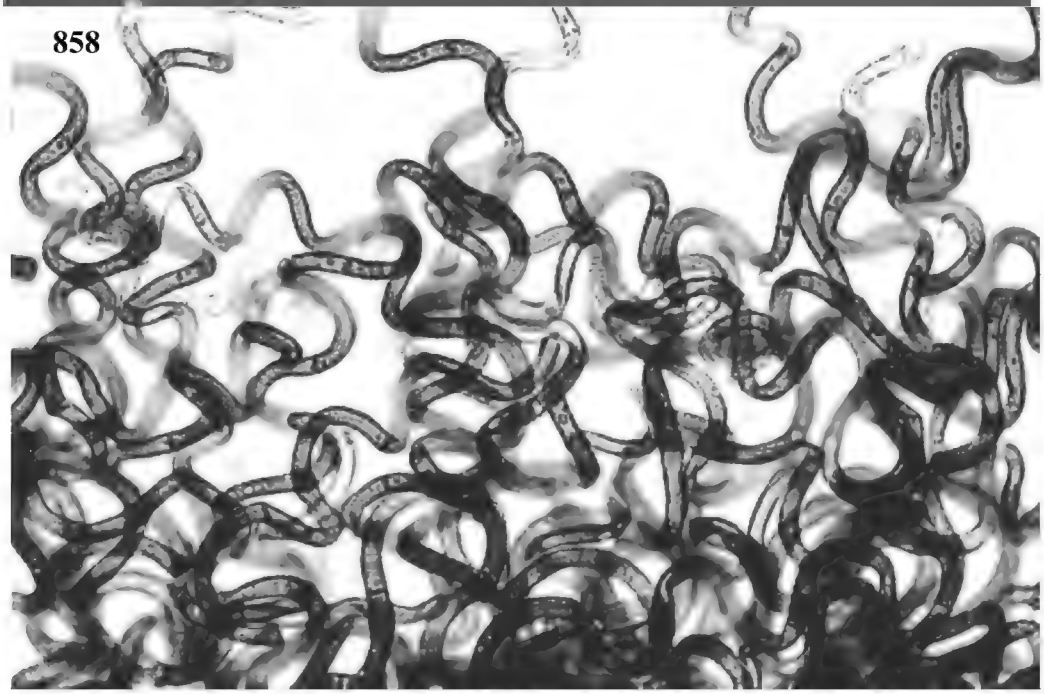
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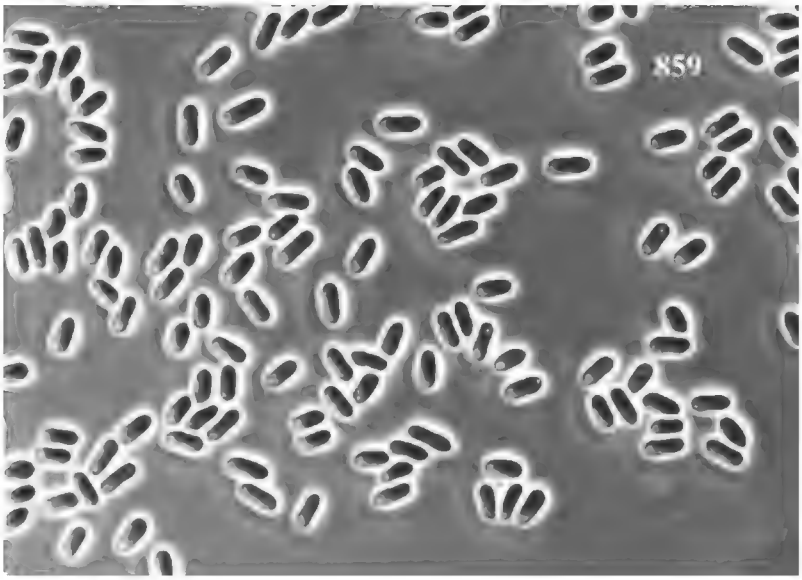
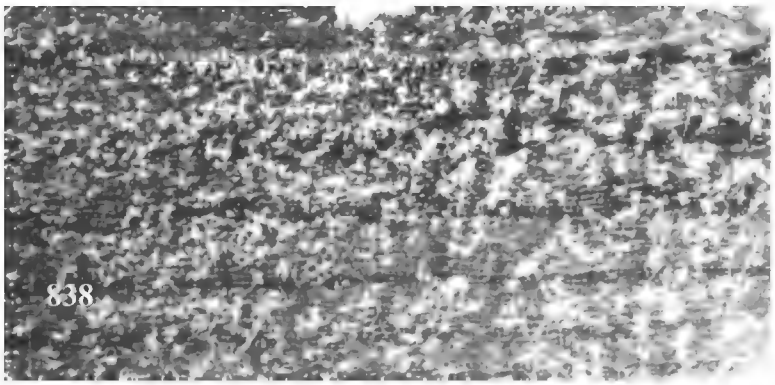

859

1316 ***Scolecobasidium cafferum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo putrescenti in rivulo; Duiwelskloof, prope Tzaneen, South Africa; Sept. 27, 1995. **Typus**: b/c cultura exsiccata, MFC-5A175.
DESCR Species nova *Scolecobasidium tropicum* proxima, differt conidiis magnioribus.
In b/c: Colonia effusa, hyphis aeriis sparsis, olivaceo-grisea, sporulatione abundanti. Hyphae vegetativae hyalinae ad pallide brunneae, laeves, non propiae. Conidiophora mononematosa, macronematosa, dense dispersa, simplicia, cylindrica, non vel pauci-septata, irregulariter curva vel torta, laevia, pallide brunnea, supra fertilia sympodialiter elongascentia pedicellis tubularibus 1.0-2.5 µm longis 0.5 µm latis praedita, 10-30 µm longa, 3.0-4.0 µm lata. Conidia fusiformia, 2-septata, leviter constricta ad septa, 20-30(-35) x (4-)5-7.5 µm, fere laevia vel inconspicue aspera, cellula centrali pallide brunnea, cellulis terminalibus subhyalinis, modice olivacea in massa.
MEM This taxon is close to *Scolecobasidium tropicum* Matsushima, in Mats. Myc. Mem. **3**, no. 363. 1983; but the conidia of the former are definetely bigger than the latter, in which the conidia are 14-20 x 4.5-6 µm. ** For conidiation, b/c is better than CMA.
ICO P838: sporulaltion on b/c, x 40.
P839: conidia, x 1000.
P840, P841, P842: conidiophores, x 2000.
F868: conidiophores & conidia, on b/c, x 1000. (in p. 209)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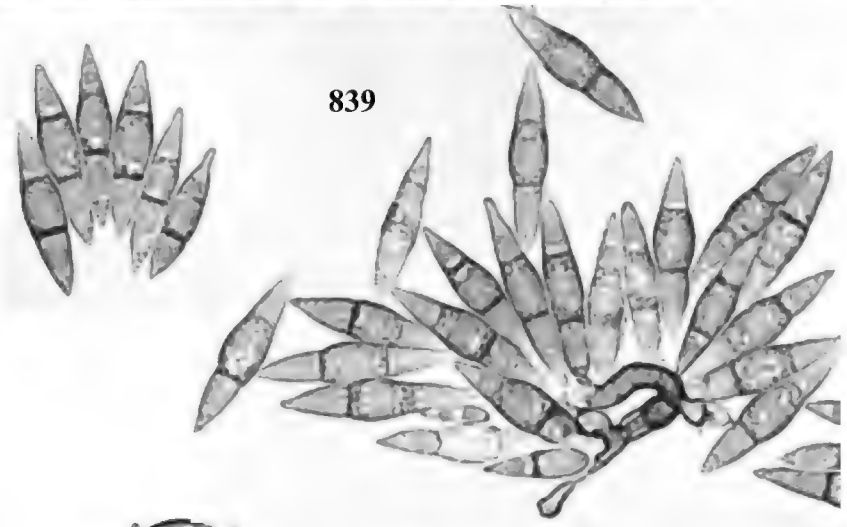
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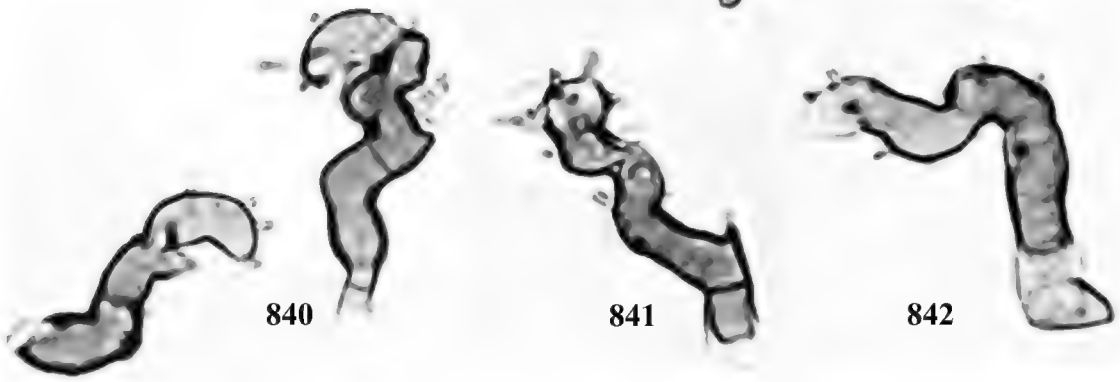
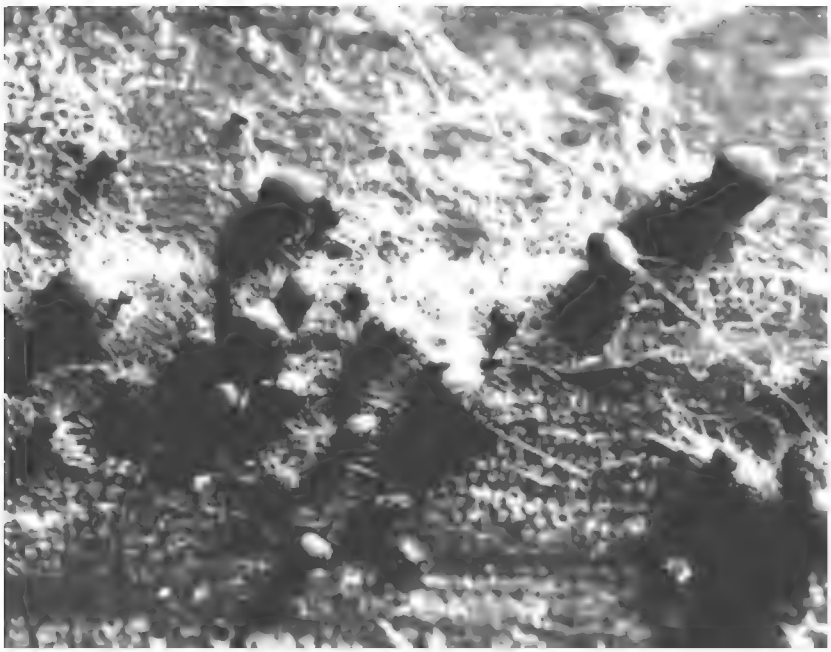
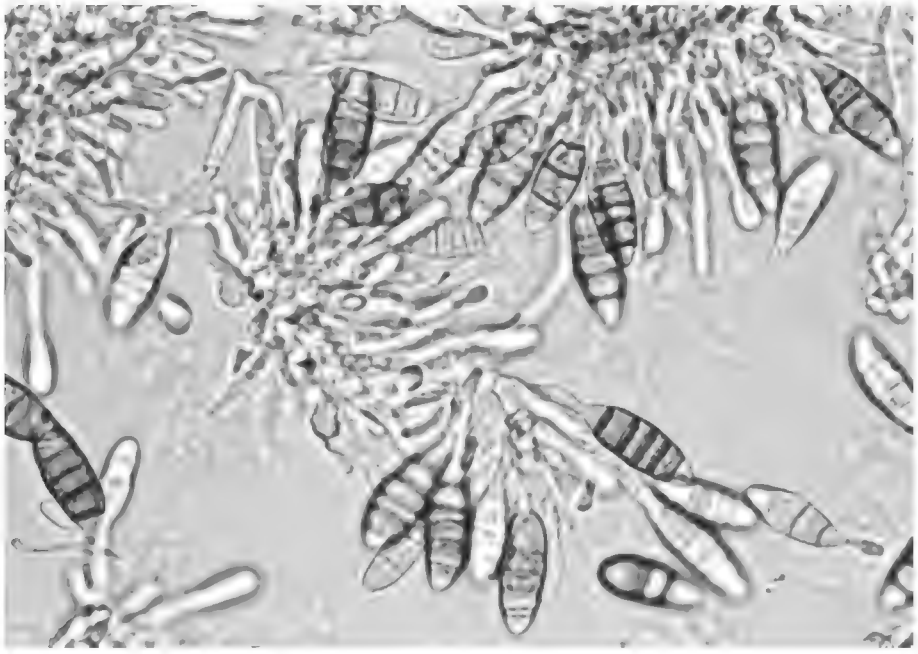

840
841
842

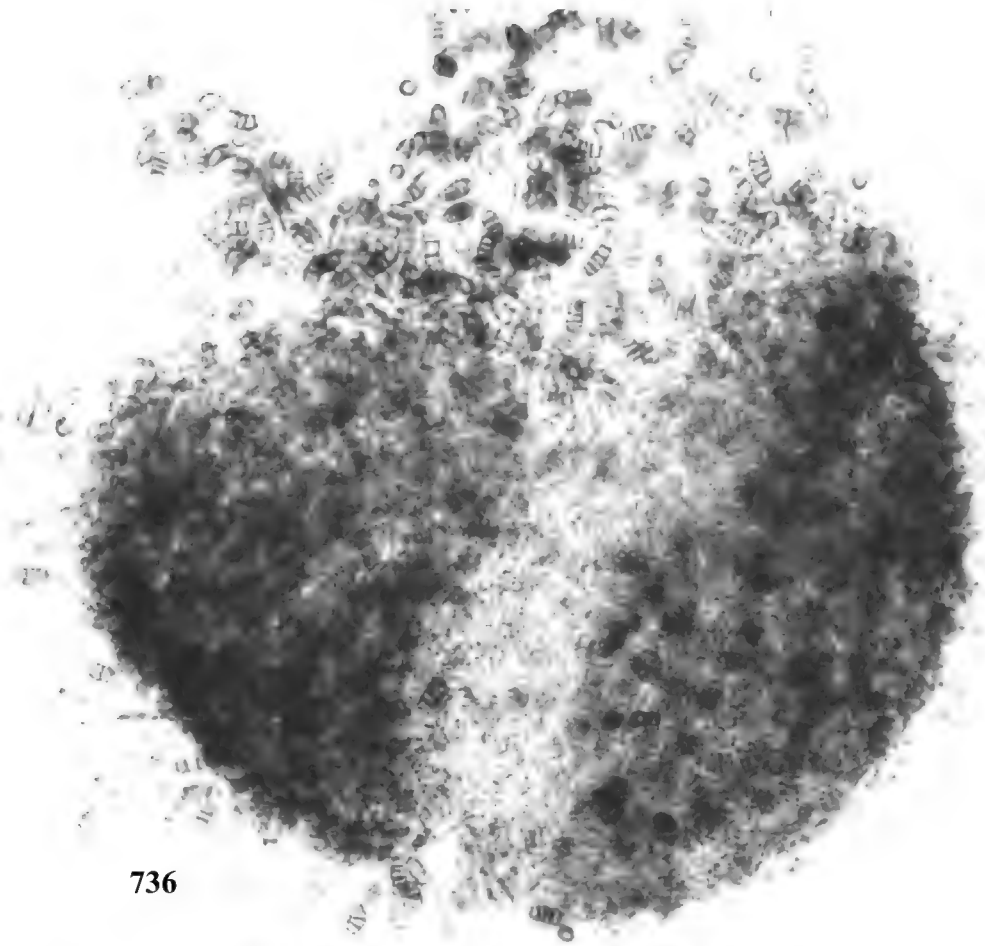
1317 ***Seiridium cafferum*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo in rivulo; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. **Typus**: b/c cultura exsiccata, MFC-5A063.
DESCR In b/c: Colonia effusa, hyphis aeriis fere nullis, pallide brunneis in massa. Conidiomata superficialia, dispersa, solitaria vel gregaria, initio globosa clausa, postea dehiscentia, tum cupulata, postremo platelliformia, atera, magnitudine variabilia, 70-350 µm in diam.; peridium pariete exteriore aspectu superficiali ex cellulis angularibus pallide brunneis compositum, pariete interiore tenue pseudoparenchymatosum hyalinum. Conidiophora deficientia vel breviter cylindrica, hyalina, ex cellulis peridii intimis orientia. Cellula conidigenae angtuste obclavatae ad cylindricae, 7-16 µm longae, 2.0-3.0 µm latae, collo annellato 1.5-2.0 µm lato, laeves, hyalinae. Conidia late fusiformia, laevia, 3-5, fere 5-septata, septis ad centrum sine poro, in conidiis vetis luminibus deminutis, 18-24 x 6.0-7.0 µm, cellulis intermediis pallide brunneis, cellulis terminalibus subhyalinis, atera mucosa in massa; appendice apaicali cellulari brevissima usque ad 1.5 µm longa, appendice basali deficienti vel brevissima usque ad 1.0 µm longa, endogena.
MEM Differentiation between *Seiridium* Nees: Fr. (1821), *Seimatosporium* Corda (1833), and *Sarcostroma* Cooke (1872) are confusing, especially in artifical cultures.
REF Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan, p. 849-883.
ICO P734: conidiomata on b/c, x 40.
P735: conidiogenous cells, x 1000.
P736: a mature conidioma on CMA, gently squashed, x 400.
P737: conidia, x 1000.



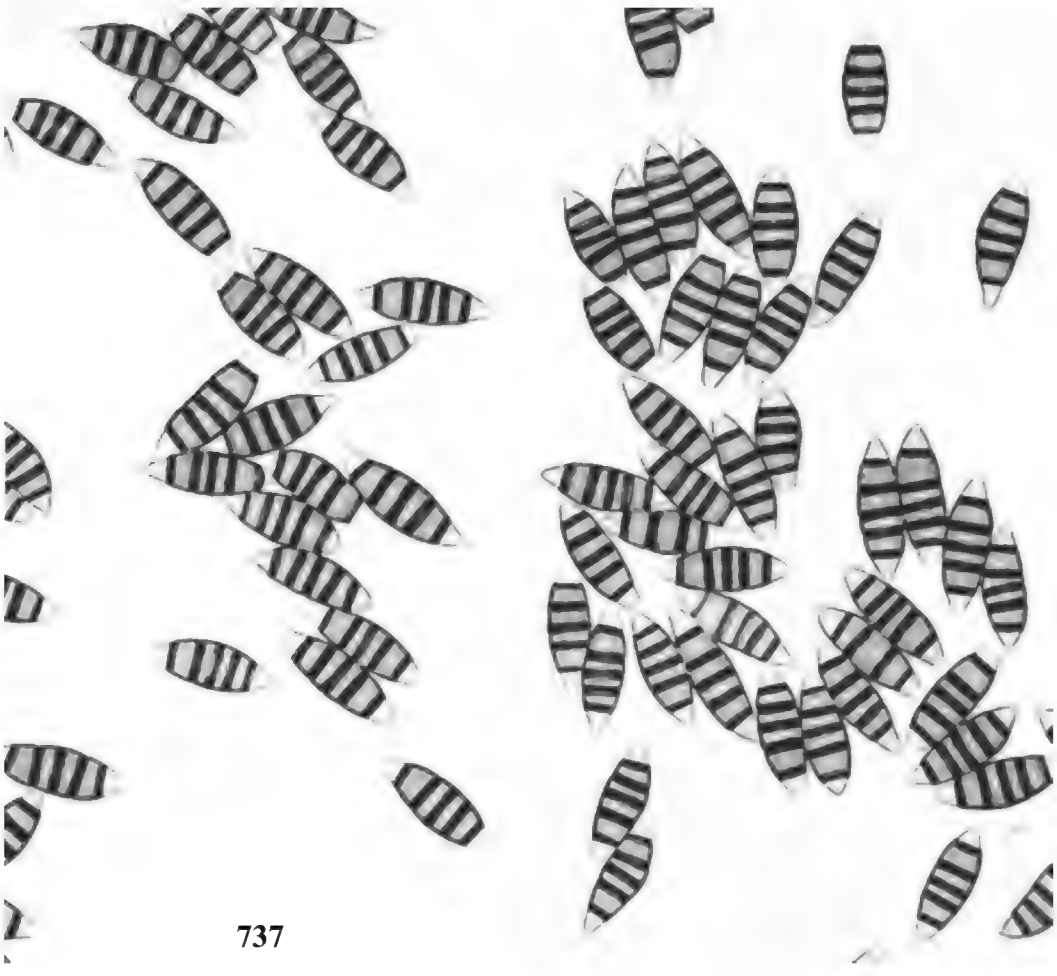
734



735



736

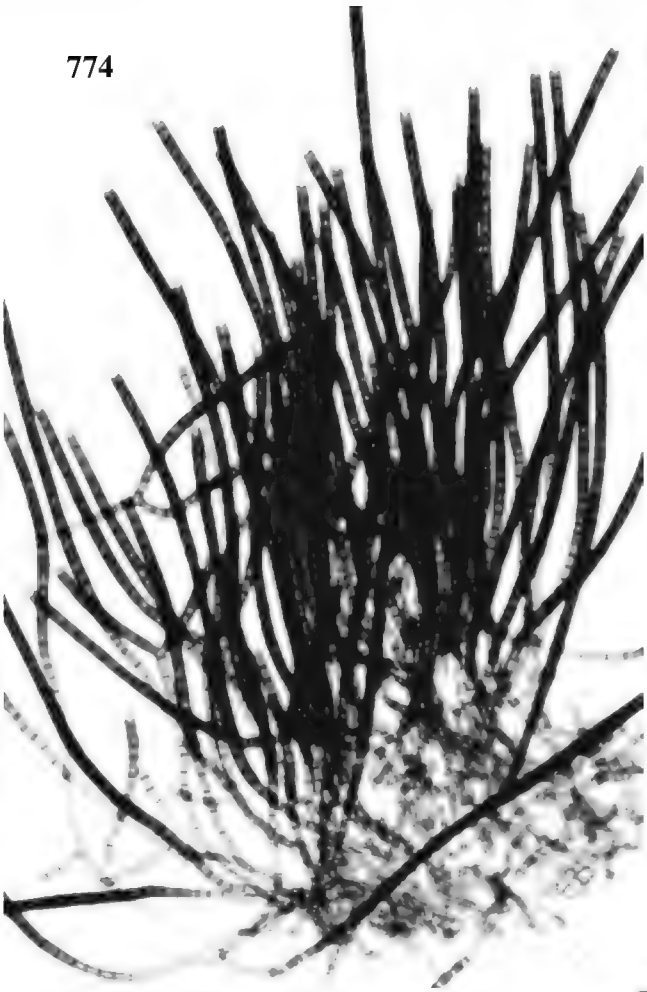


737

Soloterminospora T. Matsushima anam.- sp. nov.
Ad Hyphomycetem pertinet.
Conidiophora mononematosa, semi-macronematosa, ascendentia, solitaria vel fasciculata, filiformia simplicia vel pauci-ramosa, septata, pallide brunnea, sursum gradatim inflata, in conidia transformata. Cellula terminalis conidiophori, cellula conidiogena, atque cellula basalis conidii inter sese non distinguibiles. Conidia solitaria cylindrica recta transversaliter multi-septata brunnea. Conidia maturitatem ex conidiophoris haud secedentia. **Species typica**: *Soloterminospora caffera* T. Matsushima anam.- sp. nov.

1318 ***Soloterminospora caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo sicco denigrati fruticis spinosi; prope Vryburg (on the road side of National Route 14), South Africa; Sept. 8, 1995. **Typus**: CMA cultura exsiccata, MFC-5A089.
DESCR In CMA: Colonia modice crescens, parte centrali pilosa atera a sporulatione, circumferentia fere immersa grisea. Hyphae vegetativae ramosae septatae 1.5-6.0 µm latae, laeves hyalinae ad modice brunneae. Conidiophora semi-macronematosa, ascendentia generatim laxe fasciculata, filiformia, simplicia vel parce ramosa, septata, 60-200 µm longa 2.3-4.0 µm lata, pallide brunnea, sursum gradatim inflata, in conidia trnsformata. Cellula terminalis conidiophori, cellula conidiogena, atque cellula basalis conidii inter sese non distinguibiles. Conidia solitaria cylindrica recta, (100-)150-300(-350) µm longa, 6.5-11.0 µm lata, apice rotundata, parte basali basim versus gradatim angustata, multi-septata, distantia inter septa (1.5-)5-8(-10) µm, laevia, brunnea, cellula apicali pallidiore.
MEM For disposition of this fungus the following genera are taken into consideration: *Sporidesmium* Link (1809); *Stemphyliomma* Saccardo & Traverso (1913), *Muiaria* Thaxter (1914); *Taeniolella* Hughes (1958); *Anavirga* Sutton (1975); and *Cercosperma* Sutton & Hodges (1981).
ICO P774: conidiophores and conidia, on CMA, x 200.
P775: apical parts of conidia, x 1000.
P776: continuous transformation of conidiophores into conidia, x 1000.

774



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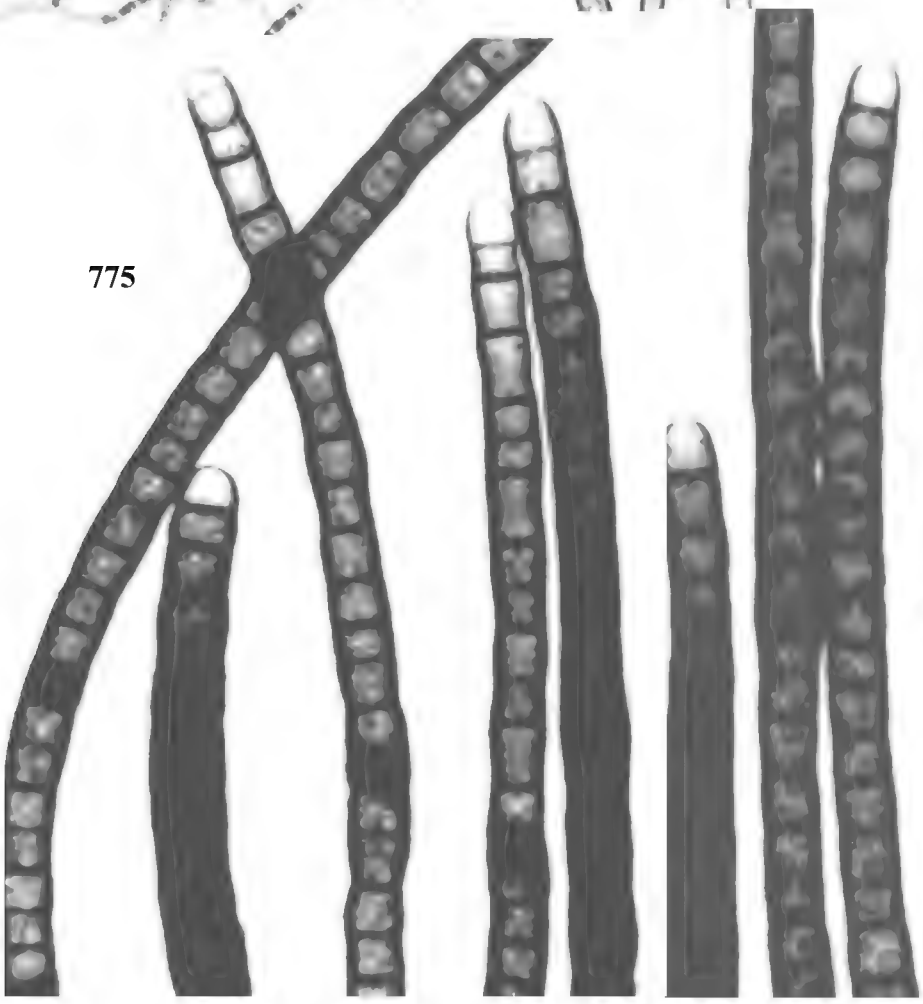
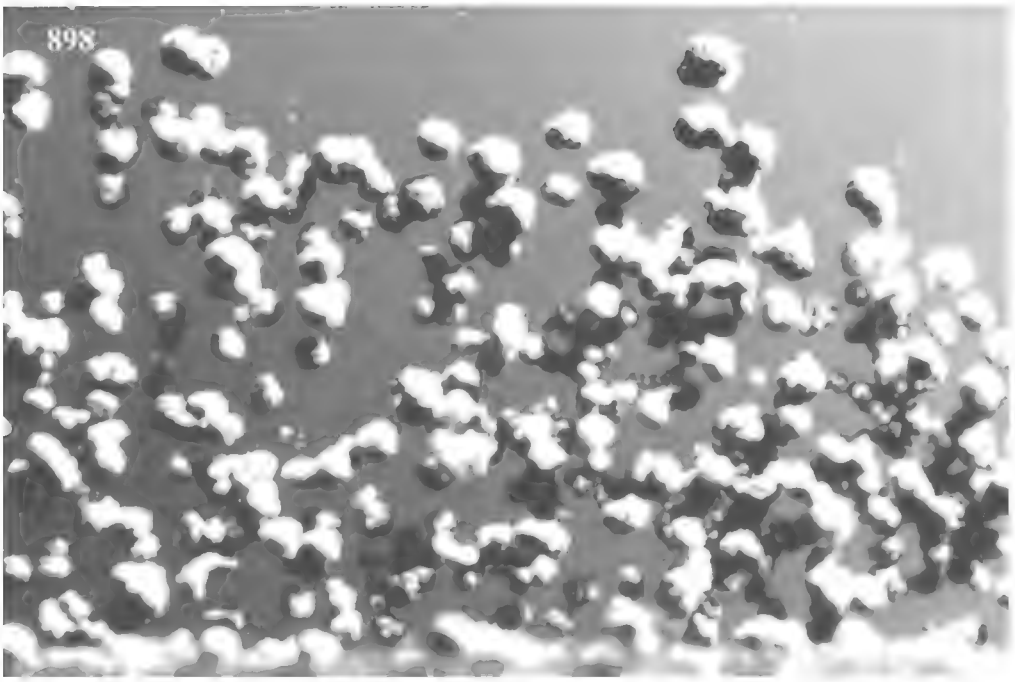
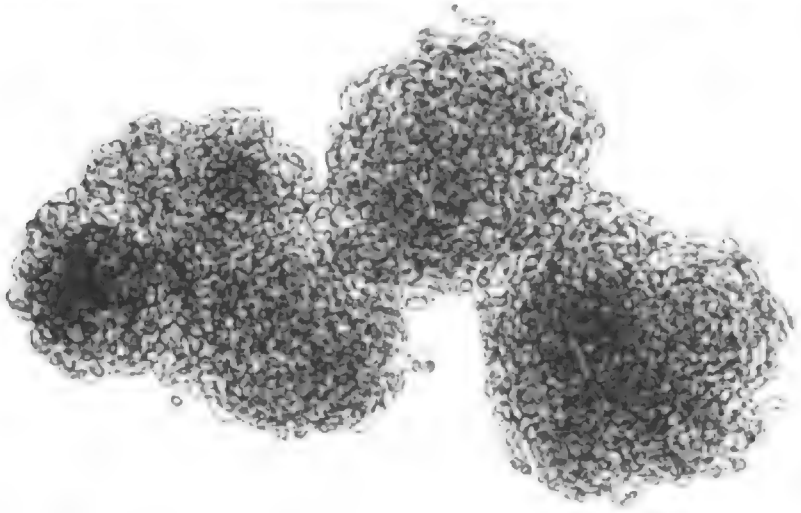
775

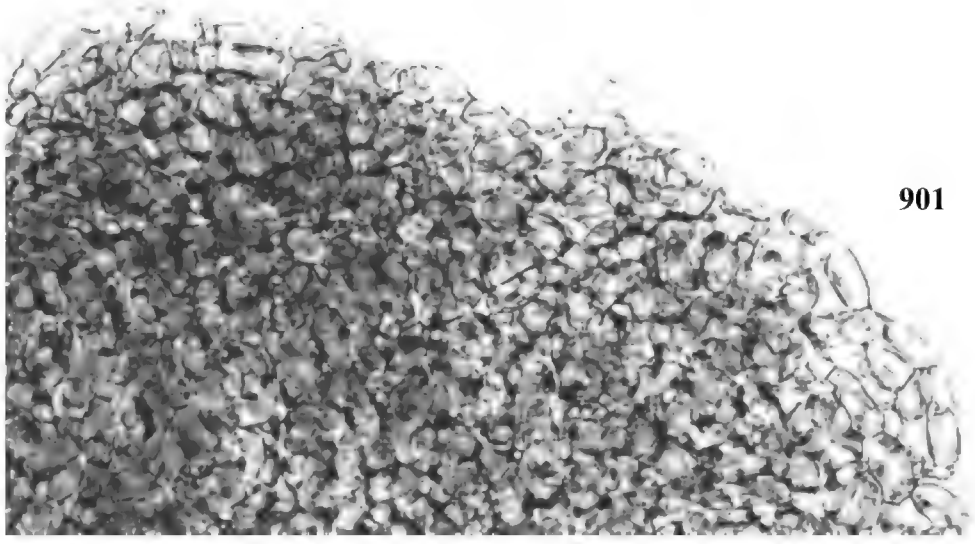


1319 ***Spirosphaera floriformis*** van Beverwijk, Trans. Br. mycol. Soc. **36**: 120. 1953.
HAB On a decaying twig in stream; Uitsoek hiking trail, near Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A185.
DESCR On CMA: Growth relatively good, central region olive-colored and powdery under a lens due to good conidiation, with submerged pale colored sterile margin. Bulbils superficial, aggregated or solitary, frequently confluent, more or less globose or bun-shaped, 50-150 μm in diam. or more, not hollow inside, olive-colored, dry, composed of much branched and densely packed chains of cells, which irregular in shape and size, 5-12.5 x 2.5-5.5 μm, smooth, olive-colored in mass. Component cells not easily separable.
REF Hennebert, G. L. 1968. Trans. Br. mycol. Soc. **51**: 13-24 & Pl. 1. => S. *floriformis*; *S. beverwijkiana* sp. nov. and *S. minuta* sp. nov.
ICO P898: bulbils on CMA, x 40.
P899: an initial of bulbil, x 1000 (phase contrast).
P900: bulbils, x 400.
P901: margin of a bulbil, x 1000.
P902, 903: parts of bulbils, squashed, x 1000.





900



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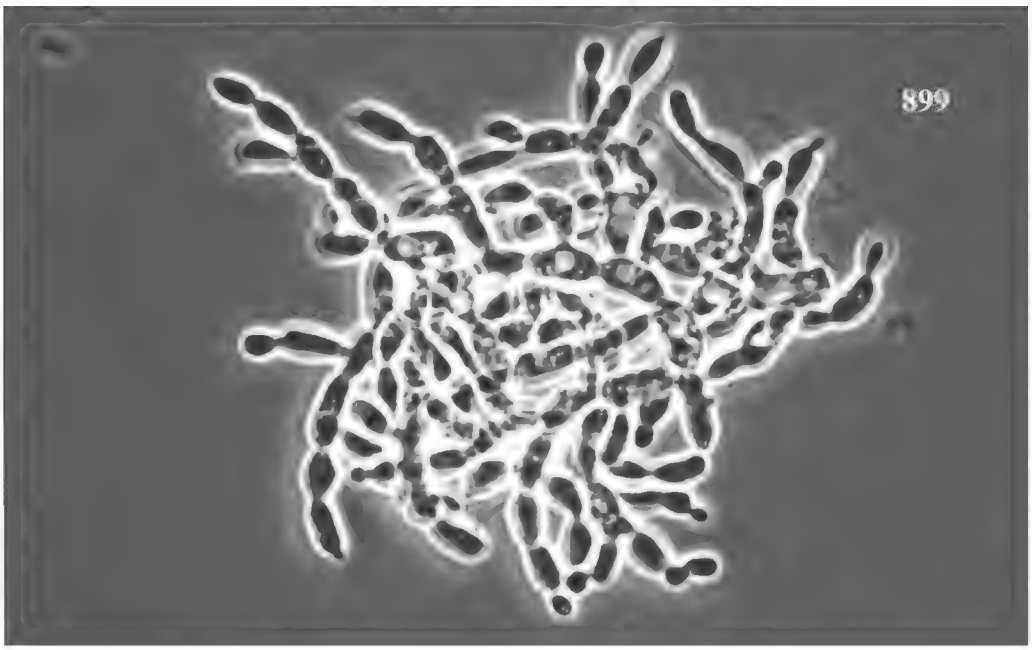
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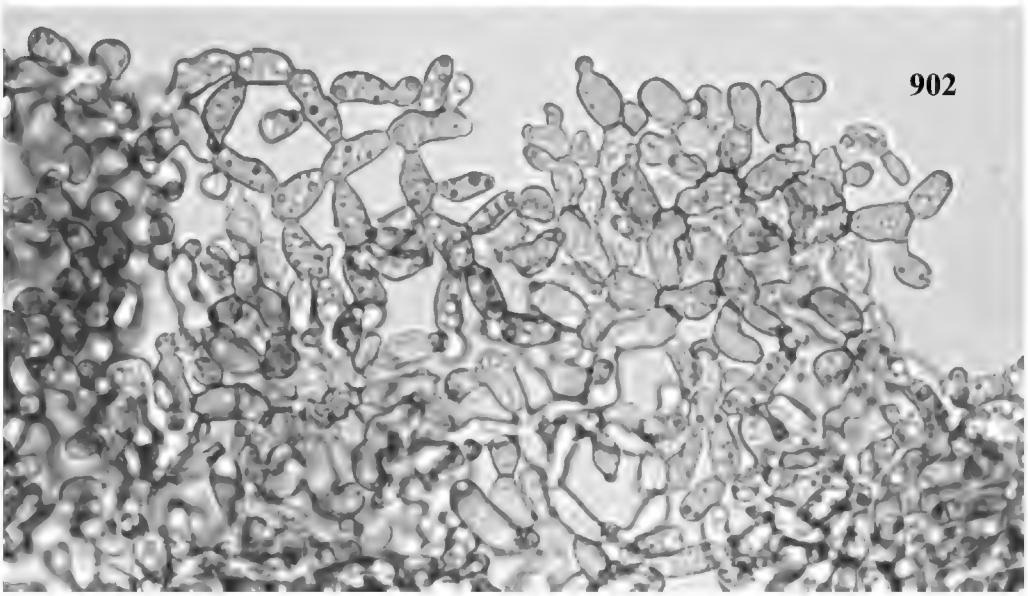
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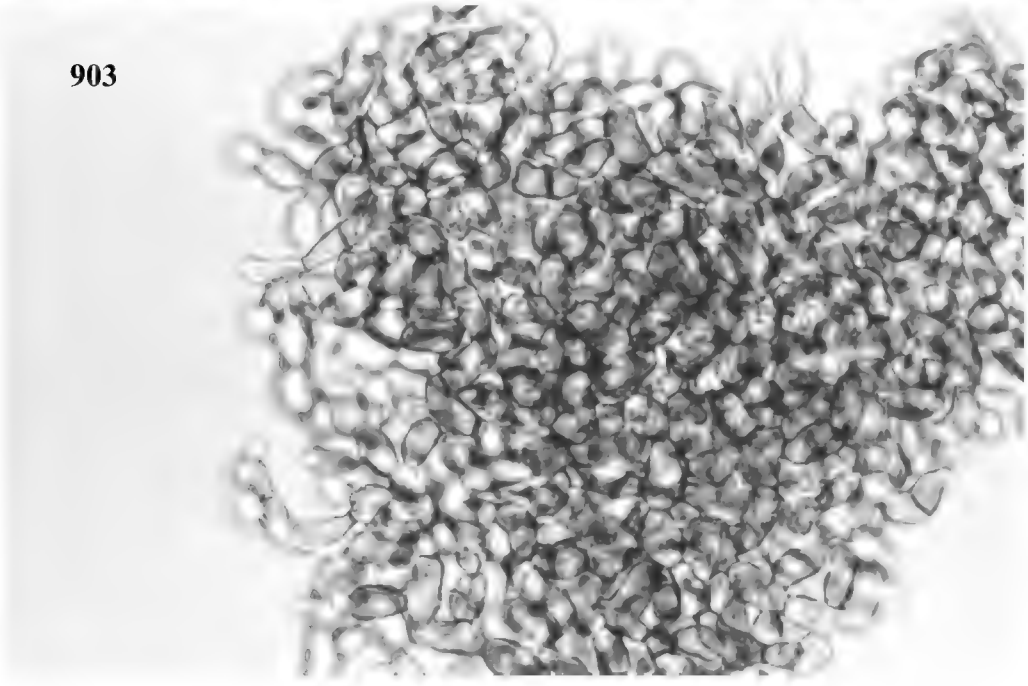
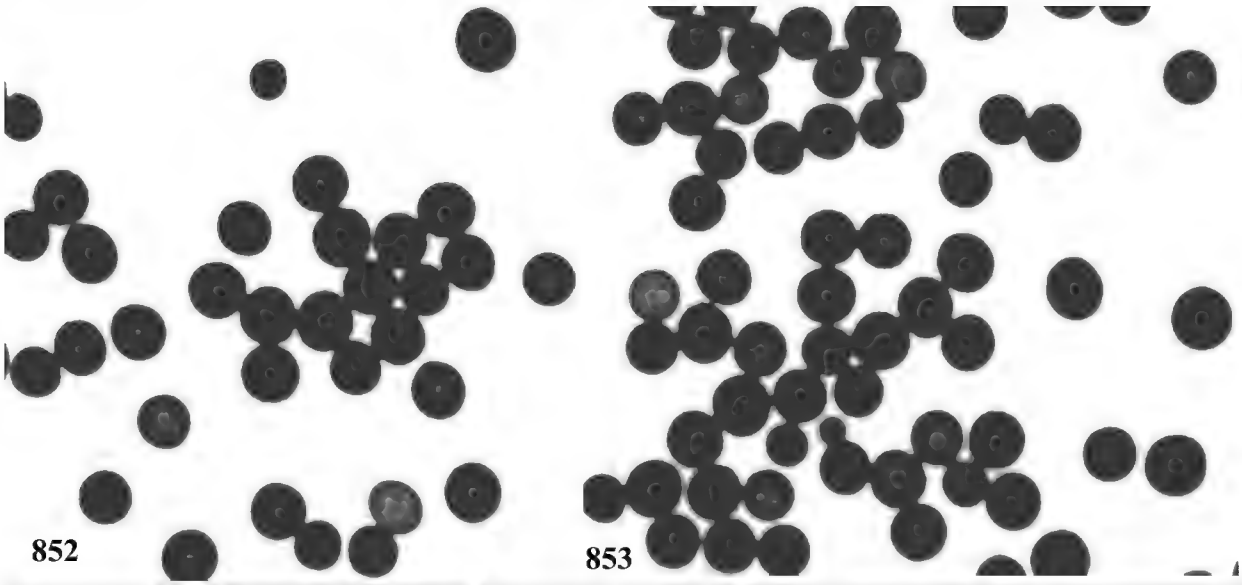

903

1320 ***Stachybotrys ruwenzoriensis*** T. Matsushima, 1985, Mats. Myc. Mem. **4**, no. 434, Fig. 287.
HAB In ramunculo putrescenti; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A254.
DESCR In b/c: Colonia effusa, mycelio aerio albo sparso, sporulatione in regione centrali. Hyphae vegetativae hyalinae ad pallidissime brunneae. Conidiophora mononematosa macronematosa, dispersa, erecta recta cylindrica simplicia, 50-70 (-90) µm longa, 1-3 (-5)-septata, luminibus deminutis, basi frequenter ad 7 µm inflata, supra basim 5-6.5 µm lata, sursum leviter angustata, sub fasciculo cellulae conidiogenae 3.5-4.0 µm lata, laevia, parte interna hyalina, part superna pallidissime brunnea, apice fasciculo cellulae conidiogenae ferentia. Cellulae conidiogenae 2-6 in fasciculo, 7-11 µm longae, 5-7 µm latae, laeves, hyalinae ad pallide olivaceo-brunneae, apice 2-2.5 µm latae enteroblasticae-phialidicae, ore intrinsecus incrassato. Conidia fere globosa, (5.5-) 6.5-8.0 µm in diam., interdum oblonga 9-11 x 7-7.5 µm, basi cicatrice inconspicua, verruculosa atro-fusca, atera mucosa in massa, capitulis cohaerentia.
MEM This species is similar in conidial size to *Stachybotrys globosda*, P. C. Misra & S. K. Srivastava (in Trans. Br. mycol. Soc. **78**: p. 556-557, 1982), but in the latter species the conidiophores branch sympodially.
ICO P852, P853: conidia, on b/c, x 1000.
P854: apical parts of conidiophores and conidiogenous cells, b/c, x 2000.



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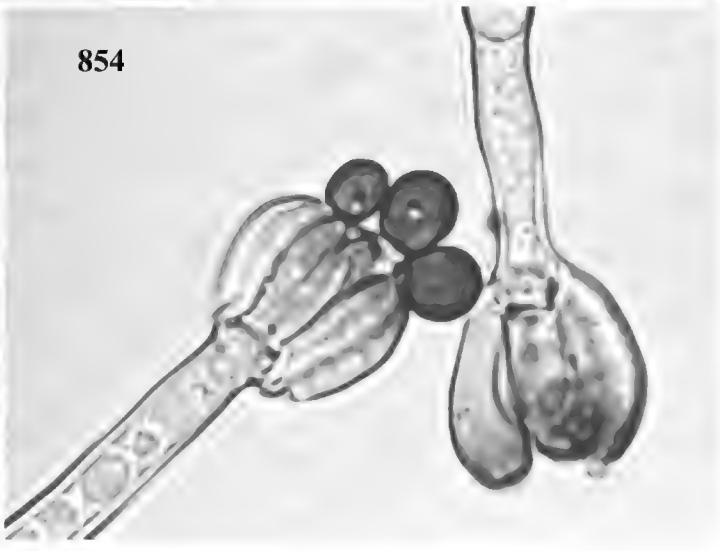


854

Stellosetifera T. Matsushima gen. nov.

Ad Ascomycetem pertinet.

Ascomata sunt perithecia, dispersa, solitaria vel gregaria, sine stromate, globosa, apice fere non rostrata, inconspicue uni-ostiolata, setis characteristicis ferentia; peridium aspectu superficiali cellulis angularibus pallide brunneis; setae ex peridio ortae, cylindricae, simplices, rigidae, atro-brunneae, apice stellatae. Asci cylindrici, fasciculati, unitunicati, 8-spori, in statu maturo fatiscentes. Ascosporae oblique uniseriatae ad irrgulares in asco, oblongae ad obovatae, 1-septatae, laeves, hyalinae, exsudantes pro massa lactanea mucosa. Anamorphosis: *Penicillifer*, *Septofusidium.* **Species typica**: *Stellosetifera malaysiana* T. Matsushima, sp. nov. **Etym.**: *stello-seti-fera* = ascomata bearing stellate setae.

1321 ***Stellosetifera malaysiana*** T. Matsushima sp. nov.

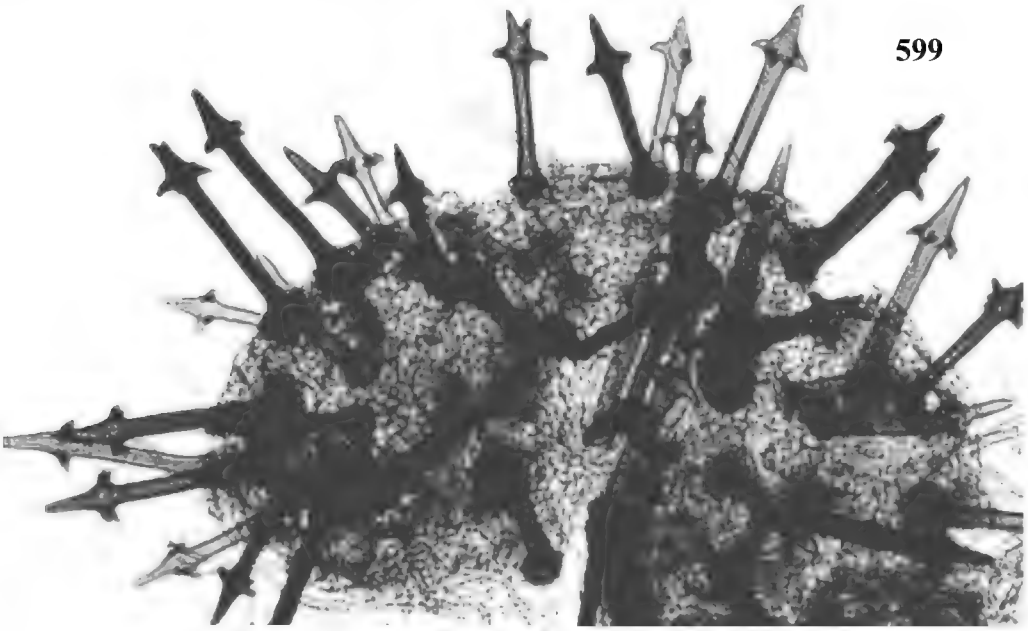
HAB In cortice putrescenti arboris latifoliae; University of Malaya Field Study Centre, Ulu Gombak, Selangor Darul Ehsan, Malaysia; June 12, 1995. **Typus**: CMA cultura exsiccata, MFC-5T237.

DESCR In CMA: Colonia modice effusa, aspectu minute pulveracea alba a conidiatione abundanti, margine diffusa incolorata sterili; reverso in regione centrali modice fusco, in circumferentia incolorato. Ascomata dispersa, superficialia, abscondita *Penicillifero*, solitaria vel gregaria, globosa, 150-250 µm in diam., apice fere non rostrata, inconspicue uni-ostiolata, setis characteriticis ferentia; peridium aspectu superficiali cellulis angularibus pallide brunneis; setae radiatim ex peridio ortae, cylindricae, simplices, rigidae, atro-brunneae, 37.5-125 µm longae, 5.0-8.5 µm latae, apice stellatae. Asci cylindrici, fasciculati, unitunicati, 8-spori, in statu maturo fatiscentes. Ascosporae oblique uniseriate ad irregulares in asco, oblongae ad obovatae, 1-septatae, 7.0-9.5 x 3.0-4.0 µm, laeves, hyalinae, exsudantes pro massa lactanea mucosa. Ascomata tarde matura. Anamorphosis: *Penicillifer variabilis* T. Matsushima (1975), p. 107 et Pl. 296, 1-2. Conidia catenata, 1-septata, conidia primo formata apice rotundata, 10-14 x 4-5 µm, conidia alia successiva cylindro-fusiformia 12-27 x 2.5-4.0 µm, hyalina, nivea sicca in massa.

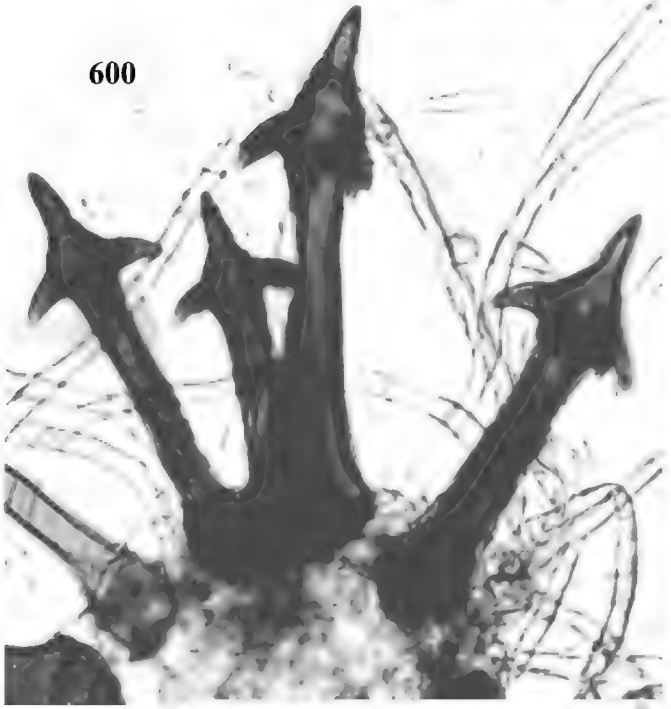
MEM Cultures ceased to produce ascomata quickly. ** The following taxa have some similarity to the present species: *Taphrophila cornu-capreoli* Scheuer (1988), *Taphrophila argyllensis* Scheuer, Spooner & Wilberforce (1991), and *Wentiomyces* sp. in M. B. Ellis & J. P. Ellis, 1985. Microfungi on land plants, Fig. 1496.

ICO P599: an ascoma, on b/c, x 400.
P600, P601: setae, x 1000.
P602: asci, x 1000.
P603: ascospores, x 1000.

599



600



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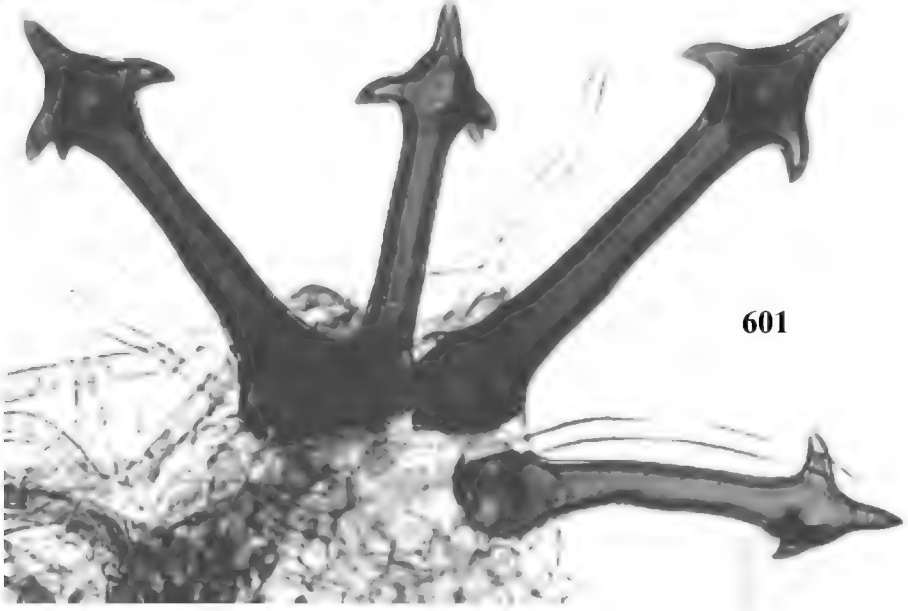
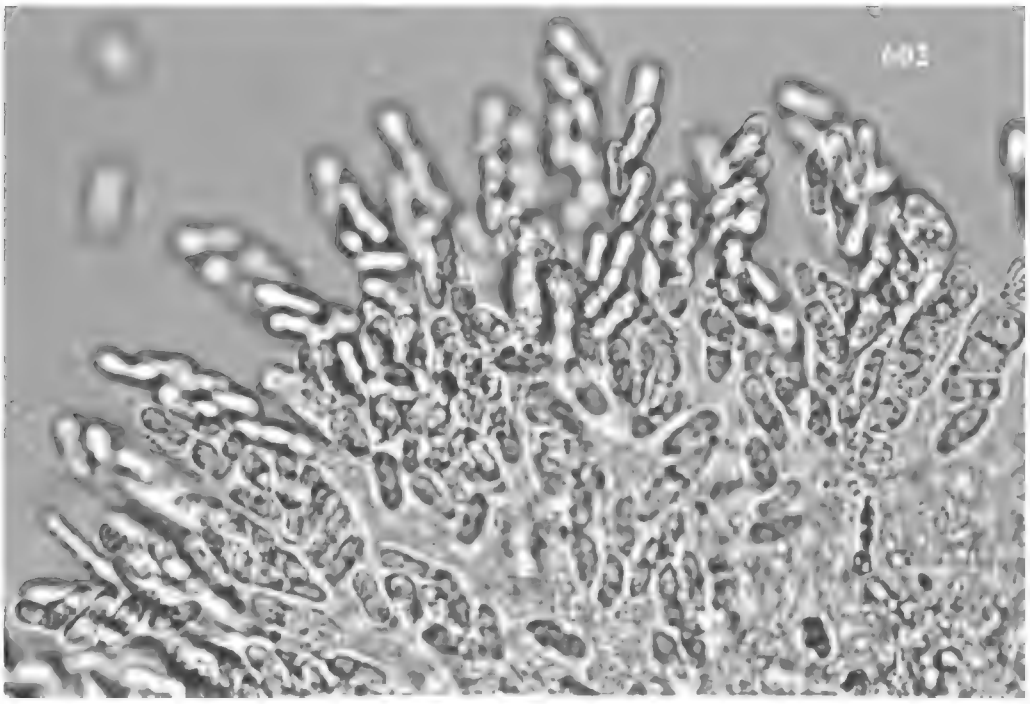




1322 ***Stemphylium*** sp. MFC-5A162

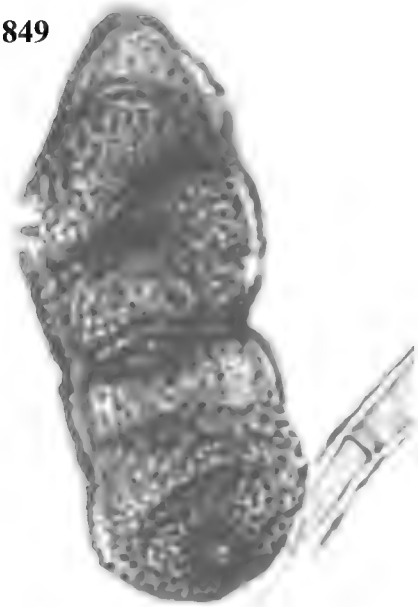
HAB On a decaying twig; Hogsback Forest Reserve, South Africa; Sept. 14, 1995.

DESCR On CMA: Colony spreading, cobweb-like, pale brownish gray. Conidiophores lateral or terminal from aerial and repent hyphae, simple, cylindrical, septate, 3.5-5.5 µm wide, smooth, light brown. Conidiogenous cells integrated terminal, cylindrical with an apical subglobose swelling of 7-9 µm wide, the lower half of which dark colored with reduced lumina and the upper half of which pale colored and thin-walled, untretic at the apex. No proliferation observed. Conidia oblong, muriform, constricted at septa especially at median transverse septum, apical cell protruded or pointed, 25-48 x 13.5-19 µm, length : width ration from 1.7 : 1 to 3.0 : 1, with dark scar at the base, finely warted, brown. Sclerotial bodies not produced. Teleomorphosis unknown.

MEM For the identification of this strain the following *Stemphylium* spp. were taken into consideration: *Stemphylium solani* Weber. Phytopathology **20**: 516-518. 1930; Morgan-Jones, G., & R. C. Sinclair, J. Alabama Acad. Sci., **49**: p. 11, 14. 1978. / *Stemphylium callistephi* Baker & Davis. Mycologia **42**: 477-486. 1950. / *Stemphylium floridanum* Hannon & Weber. Phytopathology **45**: 11-16. 1955. / *Stemphylium trifolii* Graham. Phytopathology **47**: 213-215. 1957. ** The morphology of conidia in nature and in cultures may be rather different. Since this strain is known only in culture, the identification is hesitated at present.

ICO P849, P850: conidia focused on the surface ornamentation, CMA, x 2000.
F872: conidia, on CMA, only showing shape size and septation, CMA, x 1000. (in p. 211)
F873: conidiophores and conidiogenous cells, CMA, x 1000. (in p. 211)

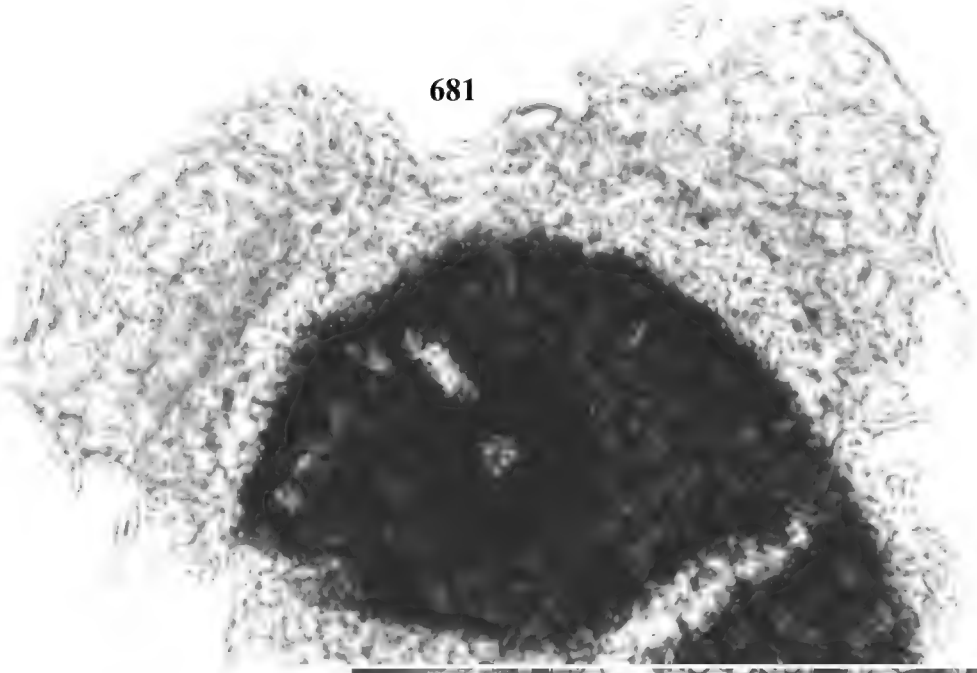
849



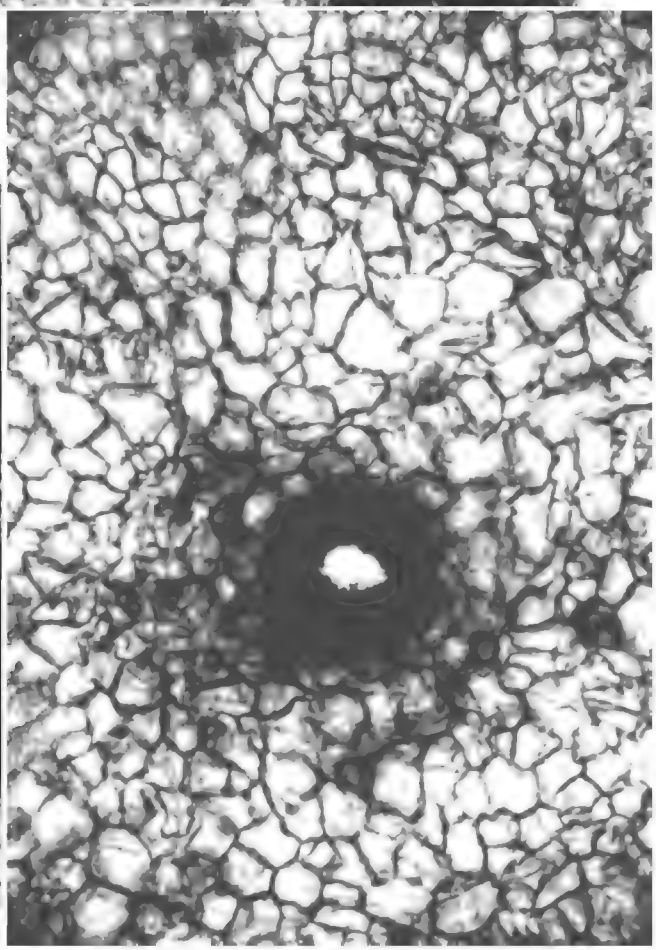
850

1323 ***Coniella clypeata*** T. Matsushima anam.- sp.nov.
HAB In folio putrescenti arboris latifoliae; Otomisu-keikoku, Hyogo Pref., Japan; Sept. 1995. **Typus**: b/c cultura exsiccata, MFC-5H413. **Etym.**: *clypeata* = pycnidia with clypea.
DESCR In b/c: Effusa, hyphis aeriis albis sparsis. Pycnidia dispersa, globosa ad late ovata, 210-440 µm in diam., uni-loculata, ostiolata, immersa praeter ostiolum, atrofusca, clypeata, basi stromata convexo ferili; clypei circum ostiolum locati, circulares continui vel multi-lobati albi pseudoparenchymatosi; peridium fuscum, aspectu superficiali textura angulari. Conidiophora in stromate pseudoparenchymatico hyalino dense contigua, ramosa, verticillo 3-4 cellulis conidiogenis terminata. Cellulae conidiogenae cylindricae, 10-22 µm longae, 1.5-2.0 µm latae, apice enteroblasticae-phialidicae, ore intrinsecus incrassato, laeves, hyalinae. Conidia cylindro-fusiformia, inaequilateralia vel leviter curva, 15-20 x 2.5-3.5 µm, laevia, hyalina, pallide fusca mucosa in massa. ** In CMA: Pycnidia frequenter non clypeata.
MEM Sutton, B. C., 1980. The Coelomycetes, p. 417-422. => 8 spp. of *Coniella* Hoehnel (1918) are described. The new species is similar to *Coniella castaneicola* (Ell. & Ev.) Sutton in the conidial shape.
ICO P680: clypeate pycnidia on b/c, x 40.
P681: a pycnidium in apical view, showing clypeate ostiole, x 400.
P682: a section of pycnidium showing basal fertile stroma, on b/c, x 400.
P683: apical view of a pycnidium, showing an ostiole (not clypeate in this pycnidium) and peridium, on CMA, x 1000.
P684: conidia, x 1000.
P685: basal stroma, x 1000.
P686: conidiogenous cells, x 1000 (phase contrast).

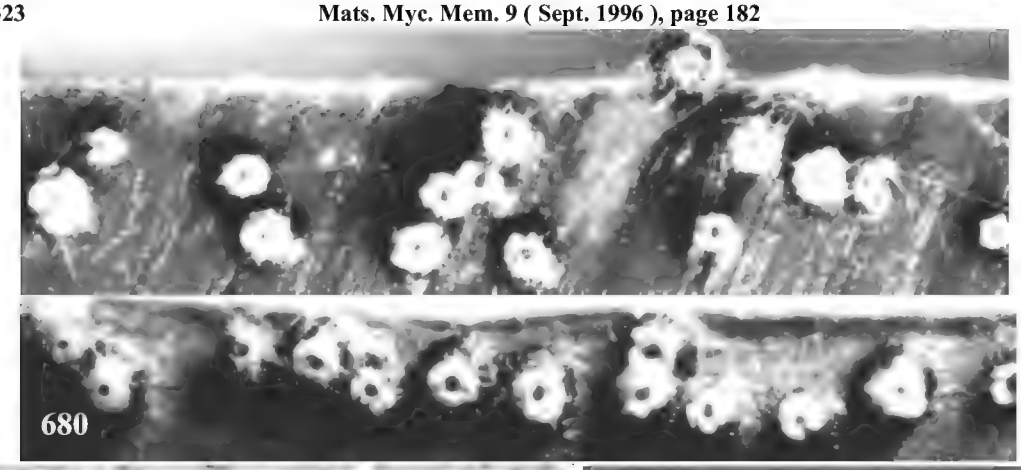
681



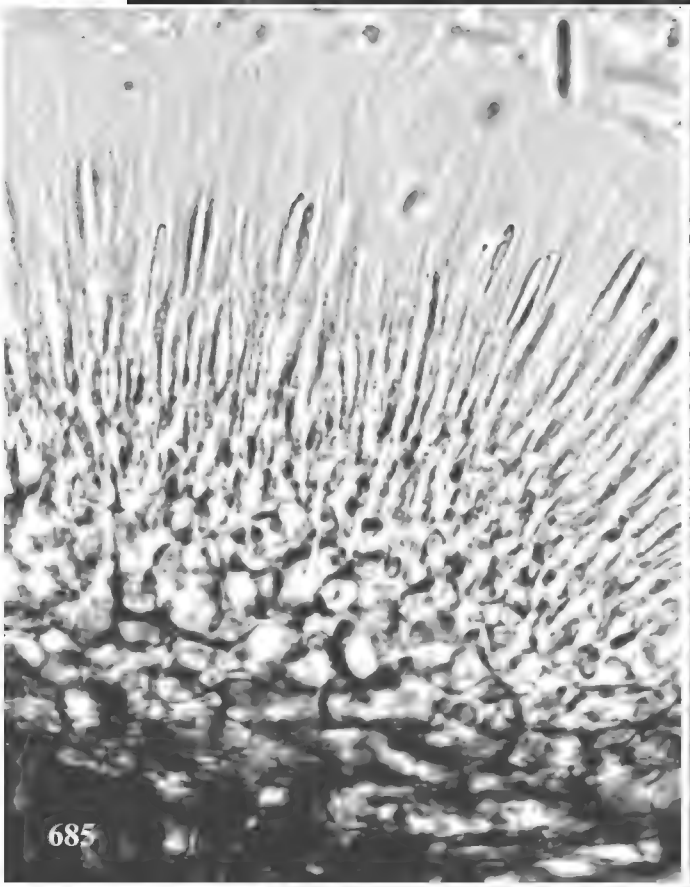
682



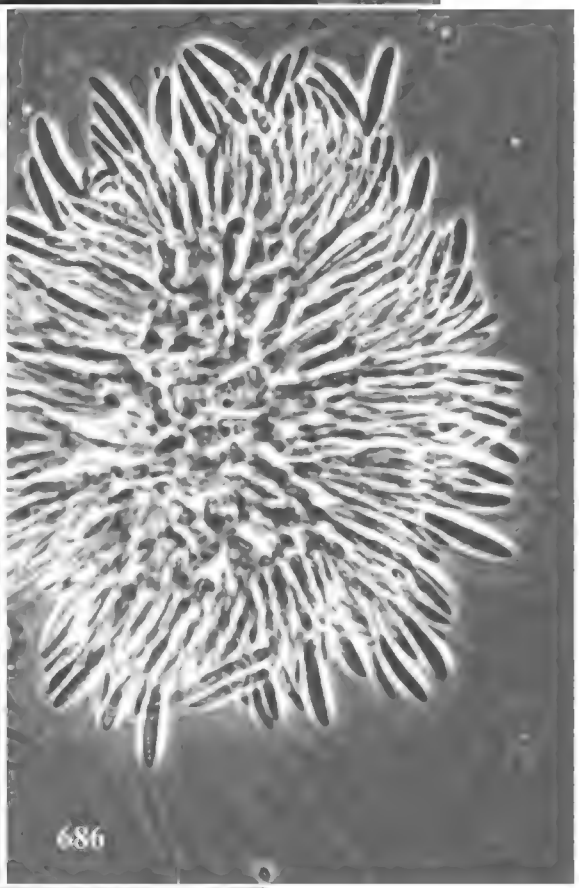
683



680



685



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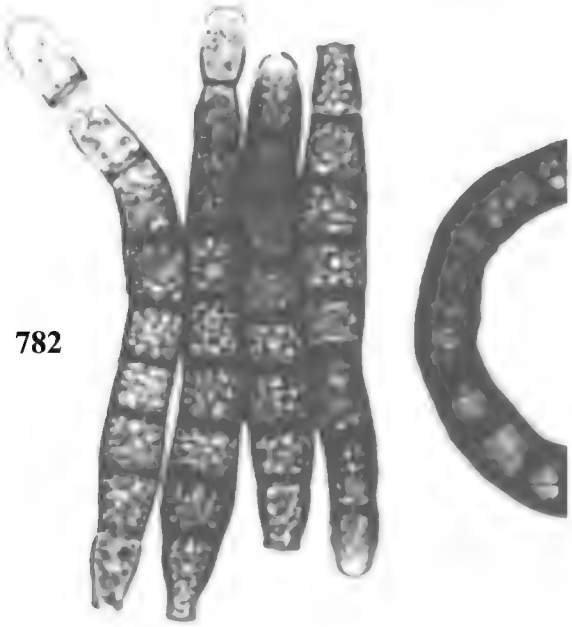
684

1324 ***Taeniolella caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo putrescenti in rivulo; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Aafrica; Sept. 28, 1995. **Typus**: CMA cultura exsiccata, MFC-5A196.
DESCR In CMA: Colonia tarde crescens, regione centrali fusca fertili, circumferentia lata alba leviter breviter floccosa. Hyphae vegetativae non propiae, ramosae, septatae, 1.0-3.5 µm latae, incoloratae, albae in massa. Conidiophora mononematosa macronematosa, dense dispersa, cylindrica, simplica 10-65 µm longa 6-8 µm lata, 0-7-septata, distantia inter septa 6-12.5 µm, laevia brunnea, prope apciem non vel leviter angustata, apcie truncata, 1-4 conidia in catena blastogena producta. Cellulae conidiogenae sunt cellulae terminales conidiophororum. Conidia cylindrica, recta vel valde curva, prope basim et prope apicem leviter angustata, 35-155 µm longa, circa medium (parte crassissima) 7-11 µm lata, 3-15-euseptata, distantia inter septa 6-12.5 µm, laevia brunnea; conidia in catena potius persistentia; liberatio conidialis shcizolytica.
ICO P781: sporulation on CMA, x 400.
P782: conidia, x 1000.
F870 (in p. 210), F871 (in p. 211): conidiophores, conidiogenous cells and conidia, arrows indicating the loci of disarticulations, CMA, x 1000.

781

782



1325 ***Tetracladium setigerum*** (Grove) Ingold, 1942. Trans,. Br. mycol. Soc. **25**: 369.
= = *Tridentaria setigera* Grove, 1912, Jour. Bot. (Lond.): **50**: 16.
HAB On rotten twig in stream; Mac Mac Fall, prope Nelspruit, South Africa; Sept. 27, 1995. MFC-5A178.
REF Tubaki, K. 1957. Bull. Nat. Sci. Mus. (Tokyo) **3**: 249-268. ** Petersen, R. H. 1962. Mycologia **54**: 117-151. ** Watanabe, T. 1975. Trans. mycol. Soc. Jap. **16**: 348-350. => *Tetracladium setigerum* associated with gentian, and strawberry roots. ** Mats. Myc. Mem. **2**, no. 298. 1981.
ICO P874: conidia, CMA, x 1000.

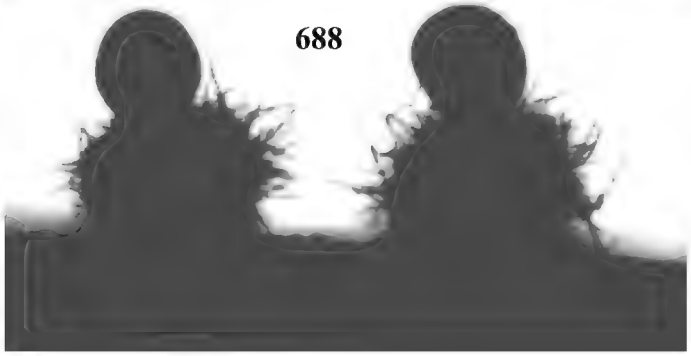

874

Textotheca T. Matsushima anam.- sp. nov.
Ad Coelomycetem pertinet.
Conidiomata pycnidia, plus minusve globosa, ostiolata. Peridium ex partibus duabus compositum; strato extimo ex hyphis ramosis, septatis, bunneis, textilibus frequenter anastomosantibus compositum; parte interiore pseudoparenchymatosum subhyalinum ad hyalinum. Conidiophora deficienta. Cellulae conidiogenae sunt cellulae peridii intimae, ampulliformes vel subglobosae vel angulares, hyalinae, apice enteroblasticae-phialidicae ore intrinsecus incrassato. Conidia unicellularia, subglobosa vel subcuneata, hyalina mucosa in massa. **Etym.**: *text-theca* = woven - case; case composed of interwoven hyphae.
Species typica: *Textotheca caffera* T. Matsushima anam.- sp. nov.

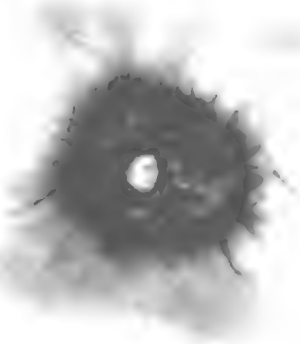
1326 ***Textotheca caffera*** T. Matsushima anam.- sp. nov.
HAB Ex solo sylvae; Hogsback Forest Reserve, South Africa; Sept. 14, 1995. Typus: b/c cultura exsiccata, MFC-5K305.
DESCR In b/c: Colonia effusa, sine hyphis aeriis. Conidiomata pycndia, dense dispersa solitaria vel 2-3 gregaria, superficialia, globosa, 125-275 µm in diam., 1 interdum 2 ostiolis circularibus circumcinctis annulo fuscato, pilosa; pili radiati modice brunnei sursum subhyalini septati laeves vel inconspicue asperi plus minusve rigidi, sursum non angustati apice obtusi, luminibus deminutis, 1.5-4.0 µm lati. Peridium ex partibus duabus compositum; strato extimo ex hyphis 2.0-4.0 µm latis, laevibus, ramosis, septatis, luminibus deminutis, subhyalinis ad modice brunneis, frequenter anastomosantibus textilibus composito; parte interiore psueoparenchymatosum, subhyalinum ad hyalinum. Conidiophora deficientia. Cellulae conidiogenae sunt cellulae peridii intimae, subglobosae oblongae conicae vel angulares, 5-8 µm altae, 3.5-7 µm latae, laeves, hyalinae, apice 2.0-2.5 µm latae, enteroblasticae-phialidicae ore intrinsecus incrassato. Conidia forma irregularia, subglobosa angularia oblonga vel subcuneata, 4.0-5.0 µm in diam., ad 5.0-9.0 x 3.5-5.0 µm, laevia hyalina, lactanea mucosa in massa. Hyphae vegegativae hyalinae non-propiae. Chlamydosporae ignotae. Synanamorphosis ignota.
Teleomorphosis ignota.
ICO P672: a pycndium in top view, x 400.
P687, P688: pycnidia in lateral view, on b/c, x 100.
P689: the same, in apical view, x 100.
P690: a pycnidium in top view, showing an ostiole and the outermost wall structure, on b/c, x 1000.
P691: conidia, x 1000.
P692: the outermost structure of a pycnidium, x 1000.
P693: a pycnidium in section, showing the outermost mycelial layer, the inner pseudoparenchymatous layer and conidiogenous cells, x 1000.

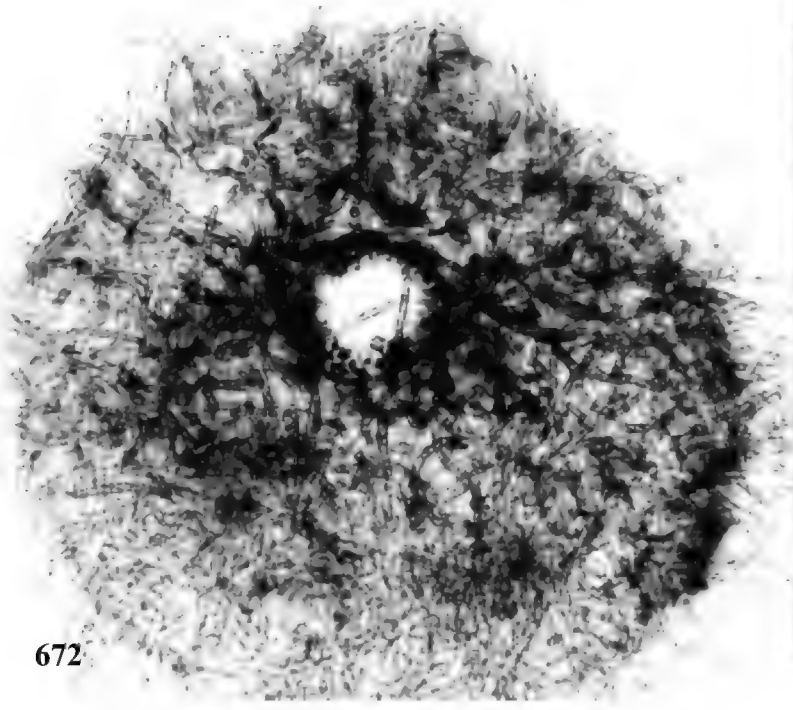
687

688

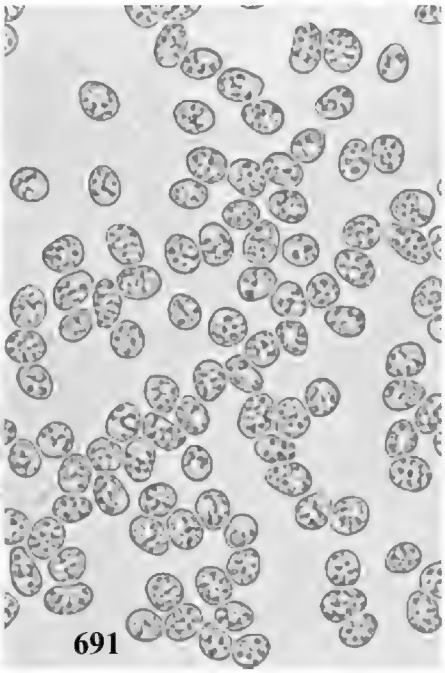


689





672



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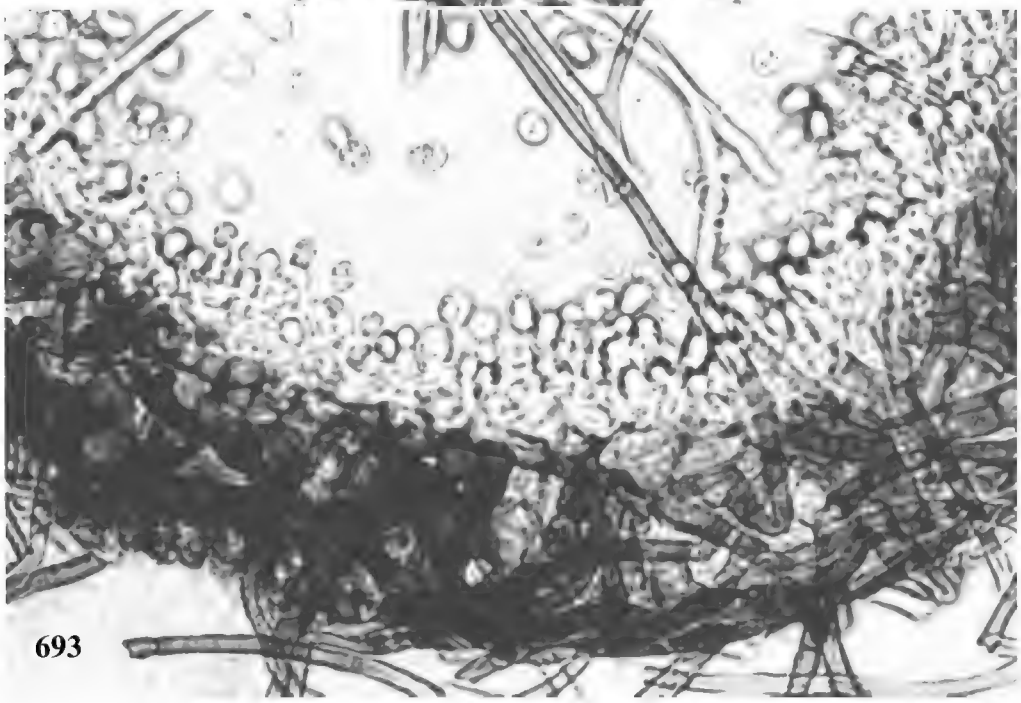
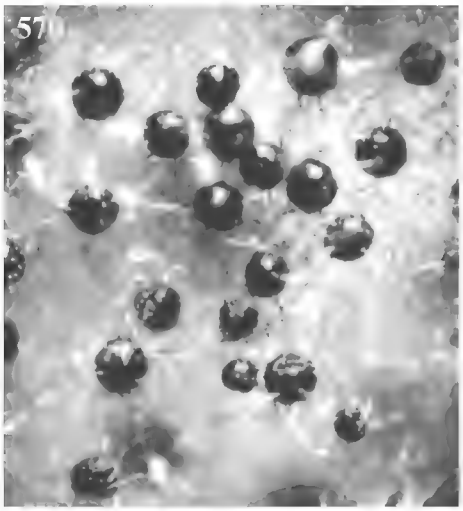
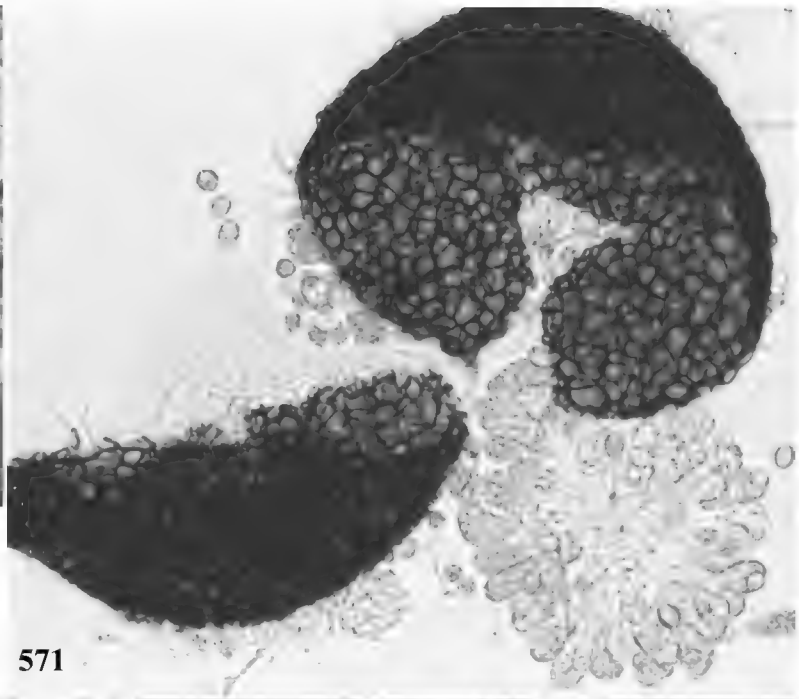


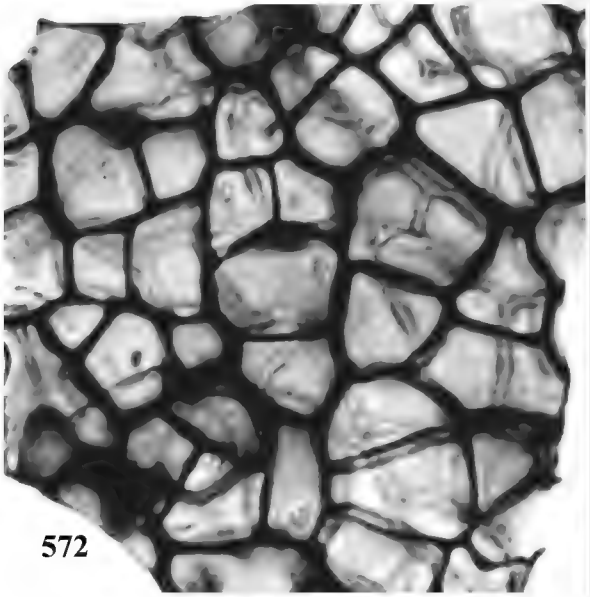
693

1327 ***Thielavia polygonoperda*** T. Matsushima, in Icones Microfungorum A Matsushima Lectorum, 1975, p. 185, Pl. 385 - 1, 5.
HAB Ex solo; Johannesburg Botanical Garden, South Africa; Sept. 22, 1995. MFC-6K059.
DESCR On CMA: Colonies growing slowly. Vegetative hyphae hyaline, white in mass, not characteristic. Ascomata superficial, globose, non-ostiolate, 40-90 µm in diam., black, solitary or aggregated, bare; peridium composed of ca. 3-layers of angular flattened cells, pale brown; paraphyses lacking. Asci unitunicate, fasciculated, 8-spored, with an evanescent wall. Ascospores broadly fusiform, with one terminal germ pore, 8-11 x 6-7.5 µm, smooth, brown.
MEM Arx, J. A. von. 1975. Studies in Mycology (Baarn) **8**, 1-32. => *Thielavia* is restricted to taxa having wall of textura epidermoidea.
ICO P570: cleistothecia on CMA, x 100.
P571: a squashed cleistothecium, x 400.
P572: peridium in surface view, showing *textura angularis*, x 1000.
P573: asci from a squashed cleistothecium, x 1000.
P574: ascospores, x 1000.
F853: near mature asci, showing only outline, x 1000. (in p. 206)





571



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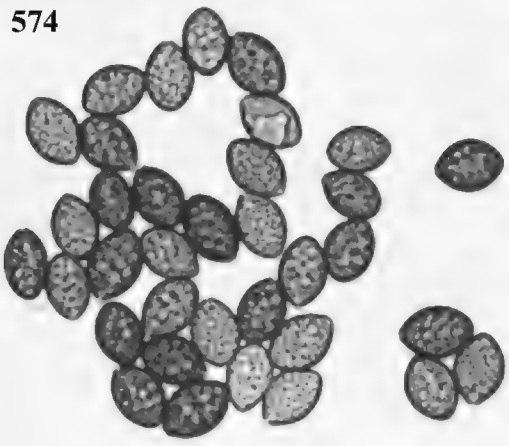
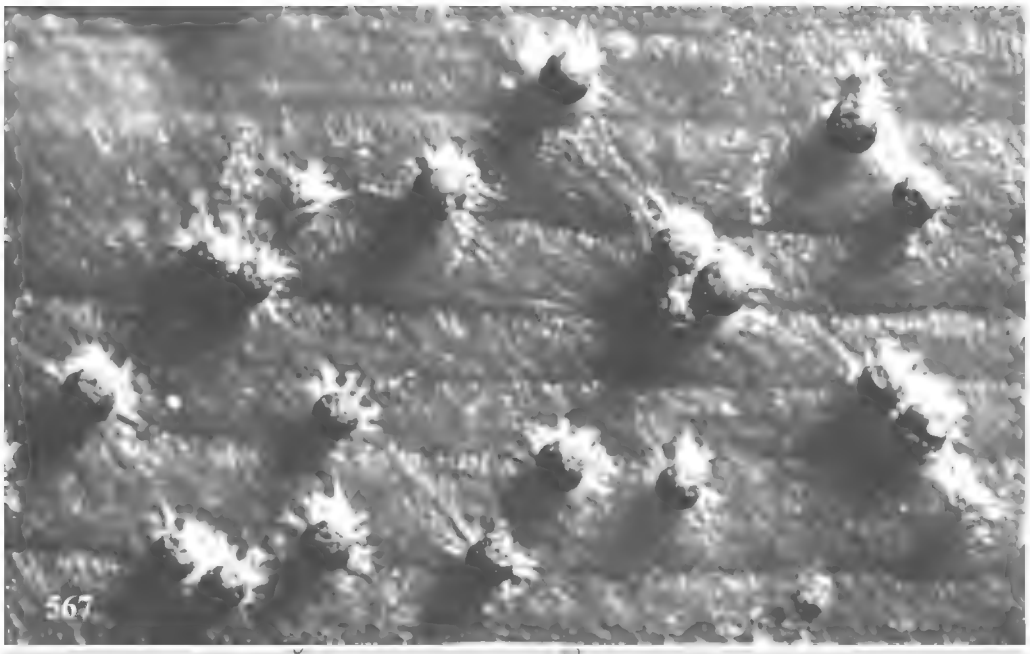


574

1328 ***Thielavia terricola*** (Gilman & Abbott) Emmons, Bull. Torrey bot. Club **57**: 124. 1930.
HAB From soil; Kamieskroon, South Africa; Sept. 10, 1995. MFC-5A026.
DESCR On b/c: Ascomata superficial, globose, non-ostiolate, black, 150-240 µm in diam., covered with loose non-specialized white hyphae; wall membranaceous, pale brown, textura epidermoidea in surface view. Asci obovate, fasciculated, 8-spored, with an evanescent wall. Ascospores broadly fusiform, 11-14.5 x 7.5-10 µm, with one terminal germ pore of ca. 1 µm in diam., smooth, brown when mature. No anamorphosis.
MEM Fide C. W. Emmons (in Bull. Torrey bot. Club **57**: 123-126 & 1 pl. 1930). *Thielavia terricola* is similar to *Thielavia basicola* (B. & Br.) Zopf, the latter is biogenous, generally sterile in cultures, but abundant ascomata production in cultures contaminaed with certain species of bacteria or fungi; ascocarps small, 70-100 µm in diam., wall very thin and transparent, ascospores 10-13 x 4.5-6.5 µm.
REF T. Matsushsima (1971), Microfungi of the Solomon Islands and Papua - New Guinea, p. 77. ** T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p.185. ** Arx, J. A. von. 1988. Sordariaceous Ascomycetes without ascospore ejaculation. Beiheft 94 zur Nova Hedwigia, p.17-22.
ICO P567: cleistothecia on b/c, x 40.
P568: a squashed cleistothecium, x 200.
P569: surface view of peridium (textura epidermoidea), x 1000.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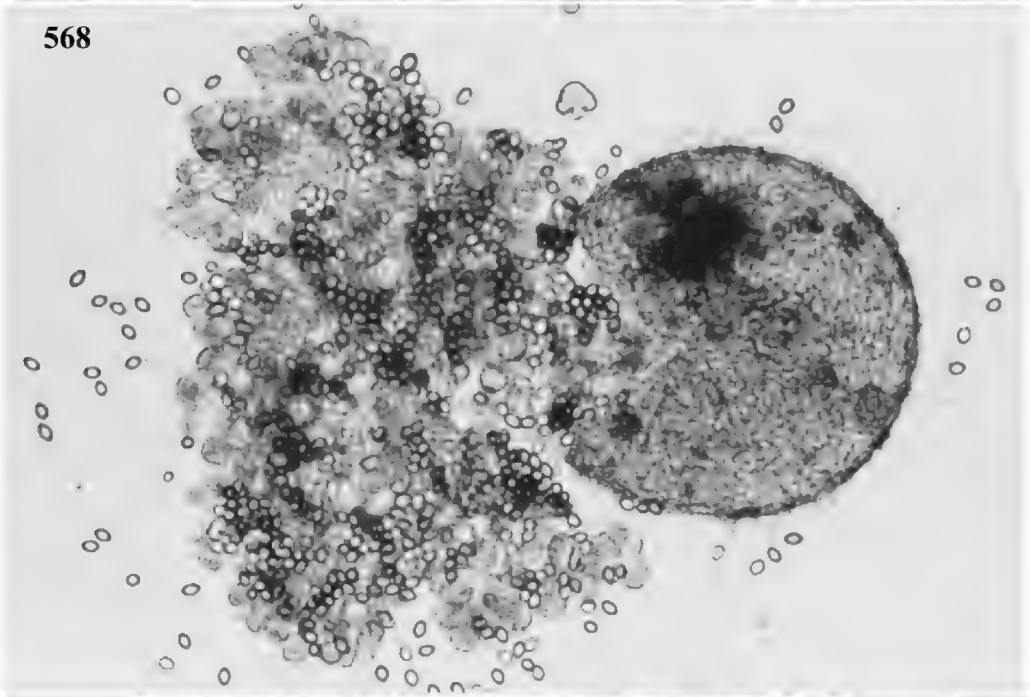
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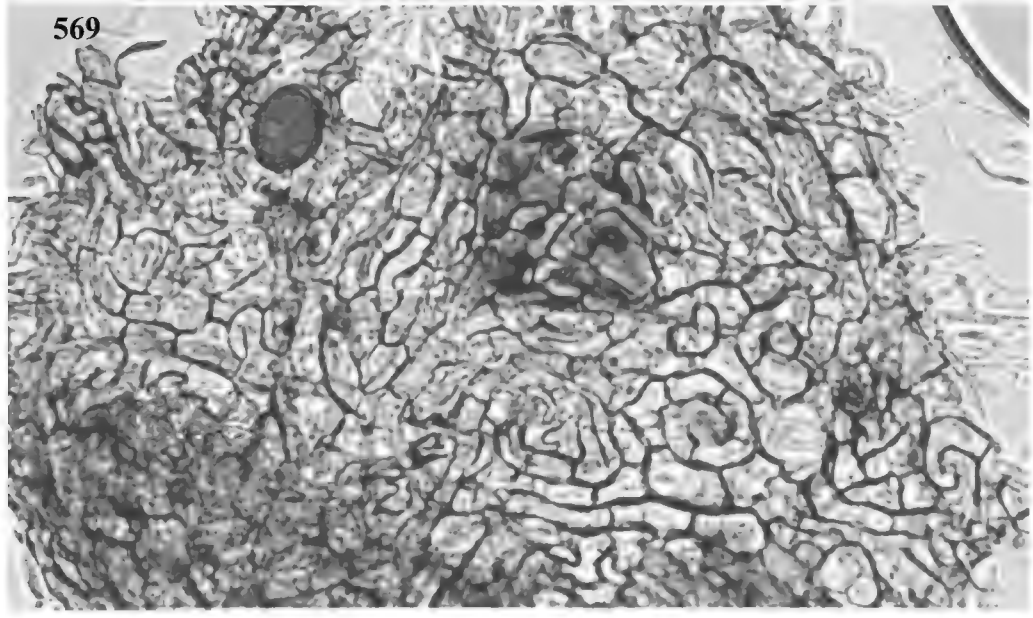
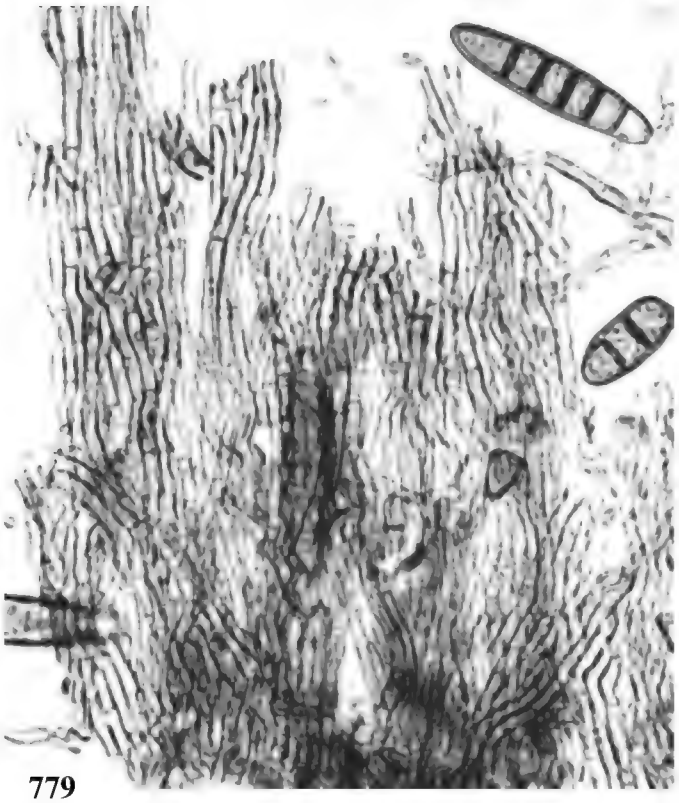

569

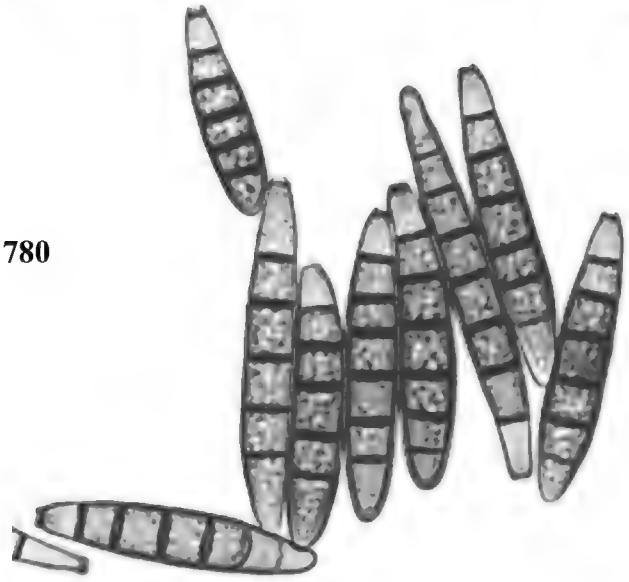
1329 ***Tridentaria implicans*** Drechsler, 1940. Mycologia **32**: 488.
HAB On a decaying twig; Kirstenbosch National Botanical Garden, near Cape Town, South Africa; Sept. 11, 1995. MFC-5A116.
DESCR On CMA: Colonies growing moderately, thin, light orange-colored, with good sporulation; margin diffusing and submerged. Conidiophores mononematous macronematous, simple erect septate filiform, 40-125 µm long, 1.5-2.0 µm wide, smooth hyaline, apically producing single conidia, occasionally a few times sympodially proliferating and forming a few additional conidia at higher levels. Conidia compoded of a stipe and 2-4, mainly 3-arms, totally 40-70 µm tall; stipes obconical, 0-1-septate, 10-20 µm long, at the base 1.0-2.0 µm wide, widen upward to 2.5-4.0 µm; arms arising at the apex of a stipe more or less synchronously, cylindro-fusiform, 30-55 µm long, 4-7(-9)-septate, 3.5-4.5 µm wide, 1.5-2.0 µm wide at the base.
REF T. Matsushima (1975), Icones Microfungorum A Matsushima Lectorum, p. 156. ** Mats. Myc. Mem. **2**, no. 301. 1981. ** Mats. Myc. Mem. **5**, no. 550. 1987. ** Mats. Myc. Mem. **7**, no. 1026. 1993.
ICO P873: conidiophores and conidia, on CMA, x 400.

873

1330 ***Verticicladus subiculifer*** T. Matsushima anam.- sp. nov.
HAB In folio putrescenti *Podocarpi* sp.; Kirstenbosch National Botanical Garden, prope Cape Town, South Africa; Sept. 11, 1995. **Typys**: CMA cultura exsiccata, MFC-5A122. **Etym.**: *subiculifer* = having subicula.
DESCR In b/c: Colonia tarde effusa, subiculo unistrato atrobrunneo ex hyphis septatis brunneis plus minusve parallelibus composito, postea velutina fusca per sporulatione abundanti in subiculo. Conidiophora ex subiculo dense orta, cylindrica, usque ad 40 µm longa, 2-4 µm lata, 0-2-septata, usque ad 3-plo repetite ramosa, frequenter lateraliter ramifera, apicibus fasiculo cellularum conidiogenarum ferentia; rami cylindrici, 5-10 µm longi, 1.5-2.5 µm lati, laeves, modice brunnei. Cellulae conidiogenae terminaliter in conidiophoris et ramis fasciculatae, cylindricae vel doliiformes, 4-10(-12.5) µm longae 2.8-3.5 µm latae, apice holoblasticae determinatae, modice brunneae. Conidia solitaria, cylindro-fusiformia, 25-60 µm longa, part crassissima 5.5-8.0 µm, 4-8-distoseptata, laevia, modice brunnea, basi 1.5-2.5 µm lata et collo (parte apicali cellulae conidiogenae) 0.5-1.0 µm longo praedita; liberatio conidialis rhexolytica. Teleomorphosis ignota.
MEM *Verticicladus amazonensis* Matsushima gen. et sp. nov. in Mats. Myc. Mem. **7**, no.1148. 1993. Originally monotypic.
ICO P779: basal subiculum formed on b/c, x 1000.
P780: conidia, x 1000.
F856: conidiophores, conidiogenous cells, and conidia; arrows indicating the loci of conidial secession, on b/c, x 1000. (in p. 206)



779



780

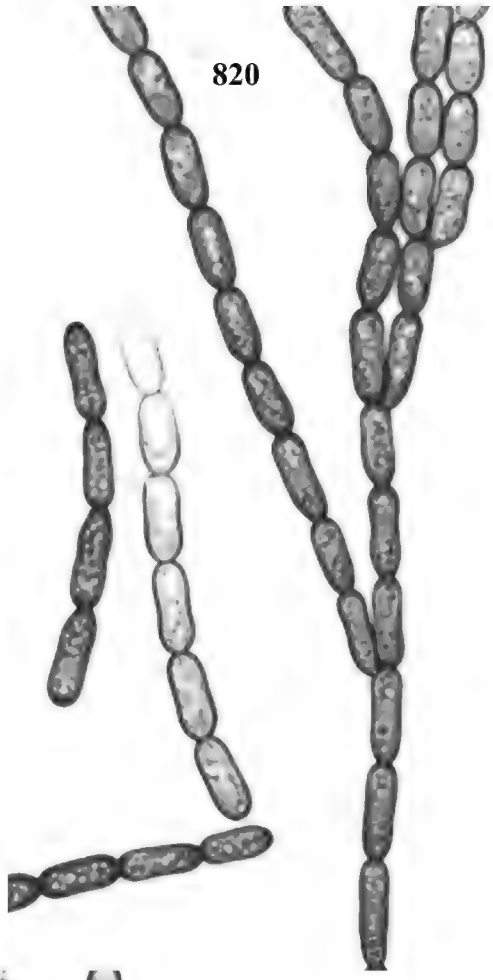
1331 ***Virgariella sphaerica*** T. Matsushima, in Icones Microfungorum A Matsushima Lectorum, 1975, p. 163.
HAB On blackened twigs of a spiny shrub; near Vryburg, on the road side of National Route 14, South Africa; Sept. 8, 1995.
DESCR On CMA: Conidiophores erect simple septate dark brown, with conidial scars of slightly raised dark circles. Conidia globose with conical protruded scars, 5.0-7.0 μm in diam., brown inconspicuously rough.

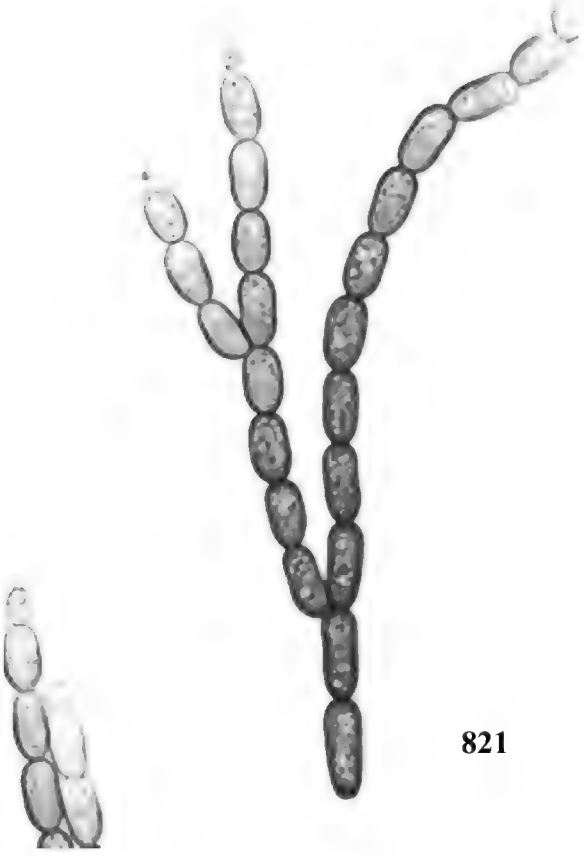
1332 ***Virgatospora echinofibrosa*** Finley, 1967, Mycologia **59**: 538-541.
Teleomorphosis: *Nectria spirostriata* Rossman, 1983, Mycol. Pap. **150**: 61-62.
HAB On a rotten twig; Uitsoek hiking trail, prope Sudwala Lodge, prope Nelspruit, South Africa; Sept. 28, 1995. MFC-5A199.
MEM In this strain, no *Nectria* state was formed on b/c and CMA.
REF Mats. Myc. Mem. **7**, no. 931. 1993.

1333 ***Xylohypha nigrescens*** (Pers. ex Fr.) Mason apud Deightobn, Mycol. Pap. **78**: 43. 1960.
HAB On a rotten twig in forest; Knysna, South Africa; Sept. 13, 1995. MFC-5A152.
DESCR On CMA: Colonies growing moderately, dark olive to brownish gray, conidiation in the central region, with wide submerded hyaline margin. Conidiophores mononematous micronematous, conidial chains arisig terminally or laterally on hyaline vegetative hyphae. Apical part of conidiophores frequently hard to distinguish from lower parts of conidial chains. Conidia continuous, in long branched blastogenous chains with narrow branching angles, 7-15 μm, mainly 9-12 μm long, (3.0-)3.5-5.5 μm wide, smooth, lower conidia in chains brown, far upper part conidia subhyaline.
REF Hughes, S. J., & J. Sugiyama. 1972. N. Z. Jl. Bot. **10**: 447-460. New Zealand fungi 18. *Xylohypha* (Fr.) Mason. ** Gamundi, I. J., et al.. Darwiniana **22**: 189-216. => *X. nigrescens*: conidia 9.6-13 x 2.8-3.8 μm. ** Mats. Myc. Mem. **4**, no. 447. 1985. => *Xylohypha palmicola* Hughes & Sugiyama (1972).
ICO P819: conidial chains, on CMA, x 400.
P820, P821, P822: the same, x 1000.

819

820





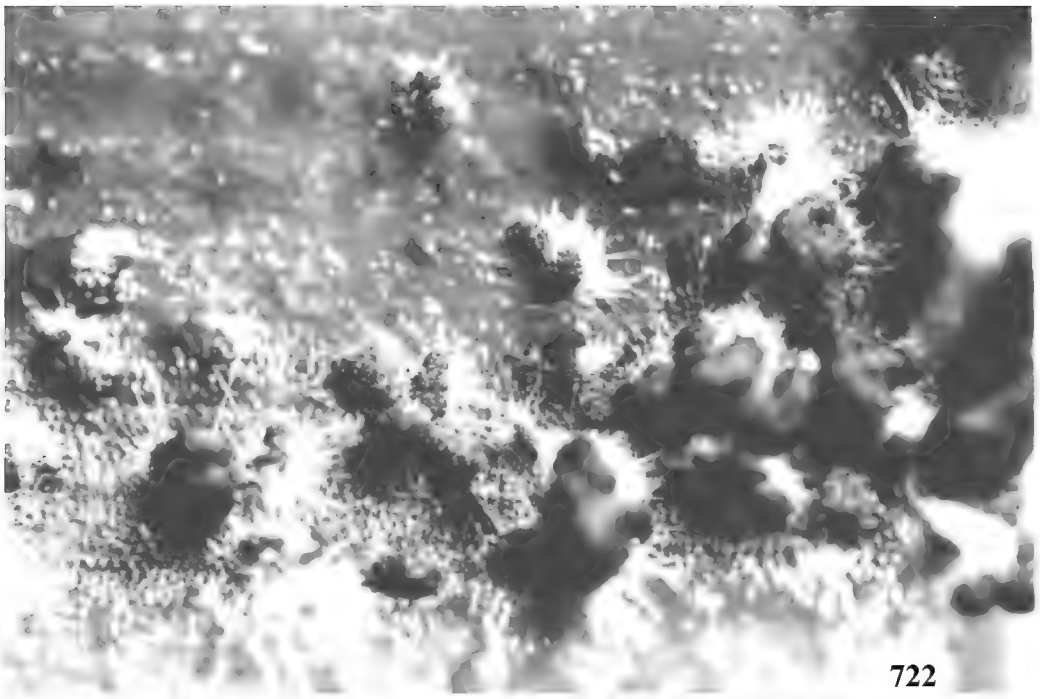
821

822

1334 ***Zetiasplozna caffera*** T. Matsushima anam.- sp. nov.
HAB In ramunculo mortuo sicco denigrati fruticis spinosi; prope Vryburg (on the road side of National Route 14), South Africa; Sept. 8, 1995. **Typus**: b/c cultura exsiccata, MFC-5A087.
DESCR In b/c: Colonia effusa, hyphis aeriis albis modice evoluta. Conidiophora dispersa solitaria vel gregaria, semi-immersa, initio clausa, subglobosa hemisphaerica ad ovata, 125-350 µm in diam., parte aeria hyphis hyalinis obtecta, ad maturitatem dehiscentia cupulascentia; peridium aspectu superficiali textura angulari pallide brunneum, parte interiore pseudoparenchymatosum subhyalinum. Conidiophora ex strato pseudoparenchymatico subhyalino dense oritentia, cylindrica septata simplicia vel parce ramosa, 2.5-3.5 µm lata, inter sese anastomosantia, laevia hyalina. Cellulae conidiogenae cylindricae 2.0-2.5 µm latae, apice annellatae, laeves hyalinae. Conidia cylindrica 4-euspetata, 25-35 x 5.0-6.5 µm, 3 cellulis centralibus pallide brunneis, cellulis terminalibus subhyalinis, laevia, setula basali endogena 5.0-8.0 µm longa; setulis apicalibus 2(-3),10-18 µm longis ex cellula apicali lateraliter orientibus. Conidia in massa atro-fusca mucosa.

In CMA: Colonia tenuiter effusa, incolorata, conidiomatibus ateris in regione centrali dense dispersis. Conidiomata superficialia vel immersa. Hyphae vegetativae ramosae, septatae, hyalinae.
REF Nag Raj, T. R. 1993. Coelomycetous anamorphs with appendage-bearing conidia. Edwards Brothers, Ann Arbor, Michigan, p. 996-1004.
ICO

P722: conidiomata on b/c, x 40.
P723: fertile stroma, x 1000.
P724, P725, P726: conidia, x 1000.



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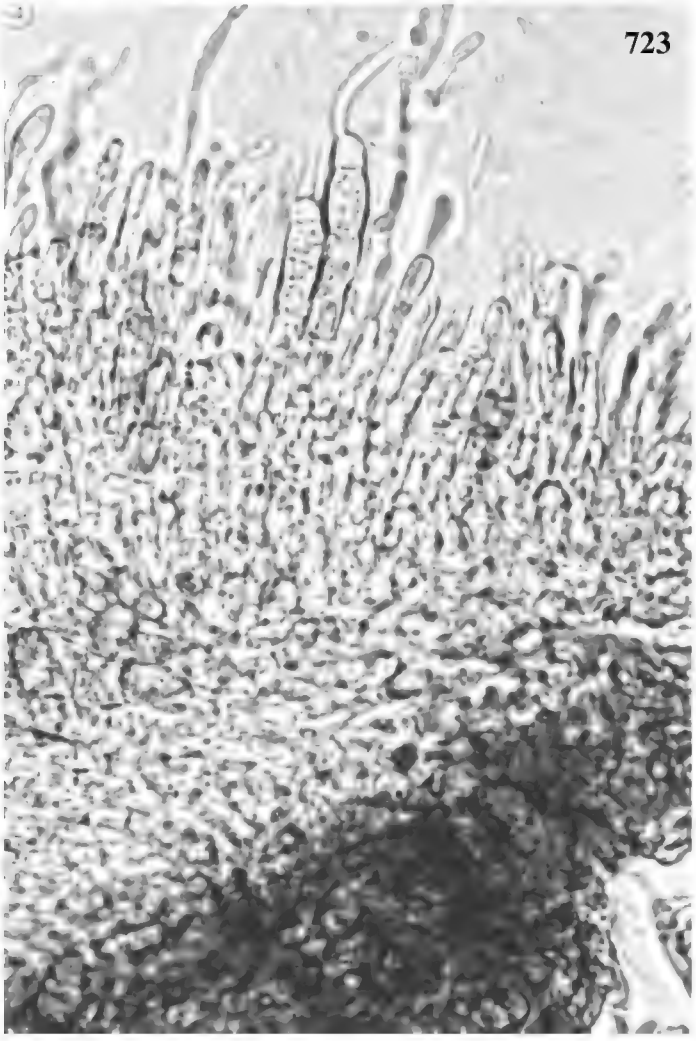

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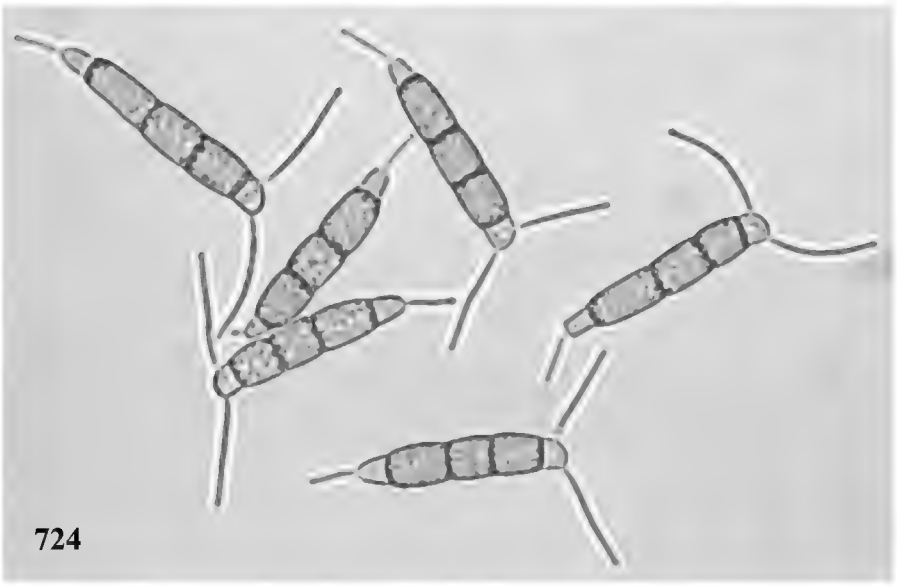

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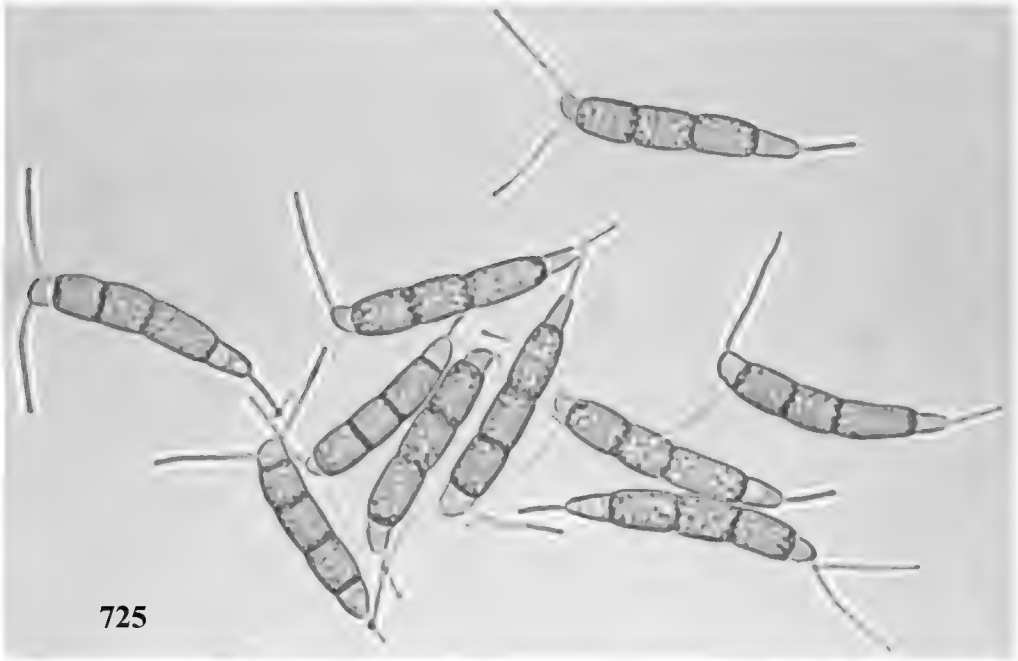


725

726

1335 ***Zopfiella erostrata*** (Griffiths) Udagawa & Furuya, Trans. mycol. Soc. Japan **15**: 208-210. 1974.
= = *Pleurage erostrata* Griffiths, Mem. Torrey bot. Club **11**: 71. 1901.
= = *Sordaria erostrata* (Griffiths) Sacc. et D. Sacc., Syll. Fung. **17**: 604. 1905.
= = *Tripterospora erostrata* (Griffiths) Cain, Can. J. Bot. **34**: 702. 1956.

HAB From goat dung; Pella Mission Station, near Pofadder, South Africa; Sept. 9, 1995. MFC-5A524.

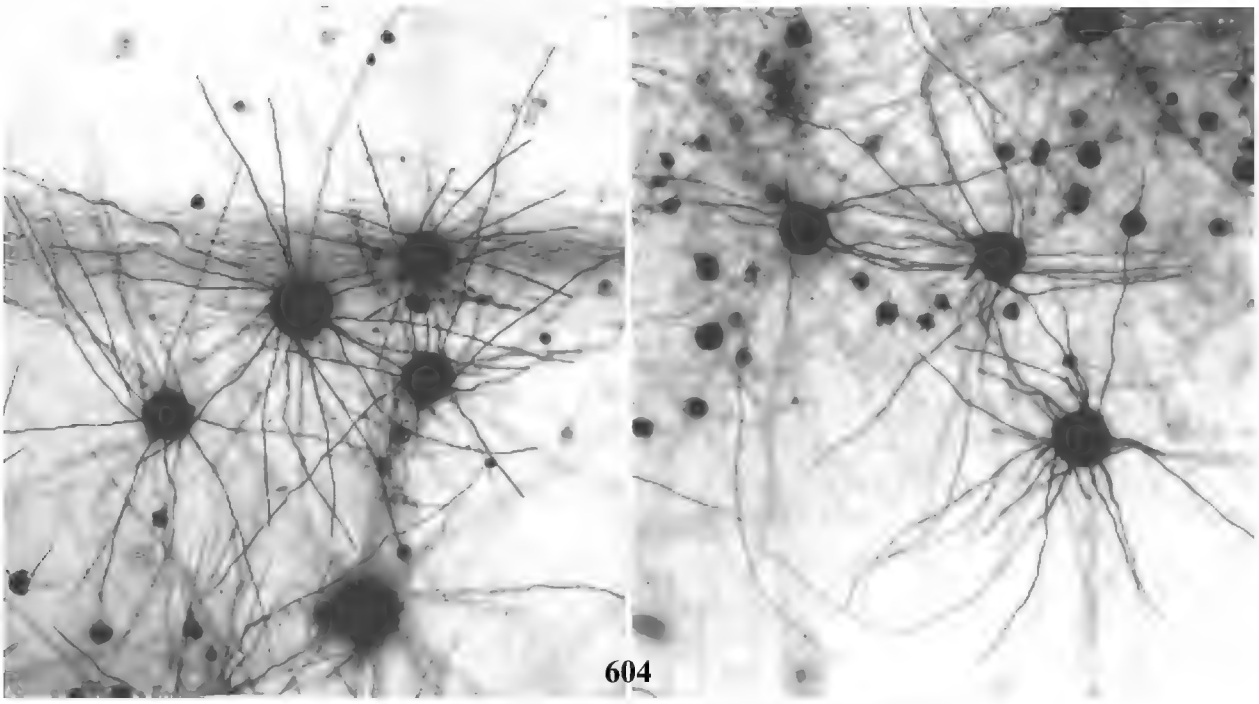
DESCR On CMA: Colonies more or less growing slowly, dark olive gray. Ascomata solitary or gregarious on and in the agar, globose non-ostiolate, (100-)125-200 µm in diam., dark brown, bearing long hairs; hairs simple septate 250-1250 µm long 4-6 µm wide, light brown; peridium thin membranaceous, textura angularis in surface view, light brown. Asci fasciculated, clavate, broadly rounded above, without an apical structure, with a short narrowing foot, irregularly to more of less biseriately 8-spored. Ascospores initially one-celled and hyaline, then becoming 2-celled; apaical one onion-shaped, 9-11 µm long 6-7.5 µm wide, with one germ-pore at the apex, brown; lower one cylindrical with a rounded base, 4-6 µm long 3-4 µm wide, hyaline, devoid of plasma and collapsing at maturity. No anamorphosis formed.

MEM This species is characteristic in the genus by having long perithecial hairs and small ascospores.

REF Cain, R. F. 1956. Can. J. Bot. **34**: 699-710. Studies of coprophilous Ascomycetes IV. *Tripterospora*, a new cleistocarpous genus in a new family.

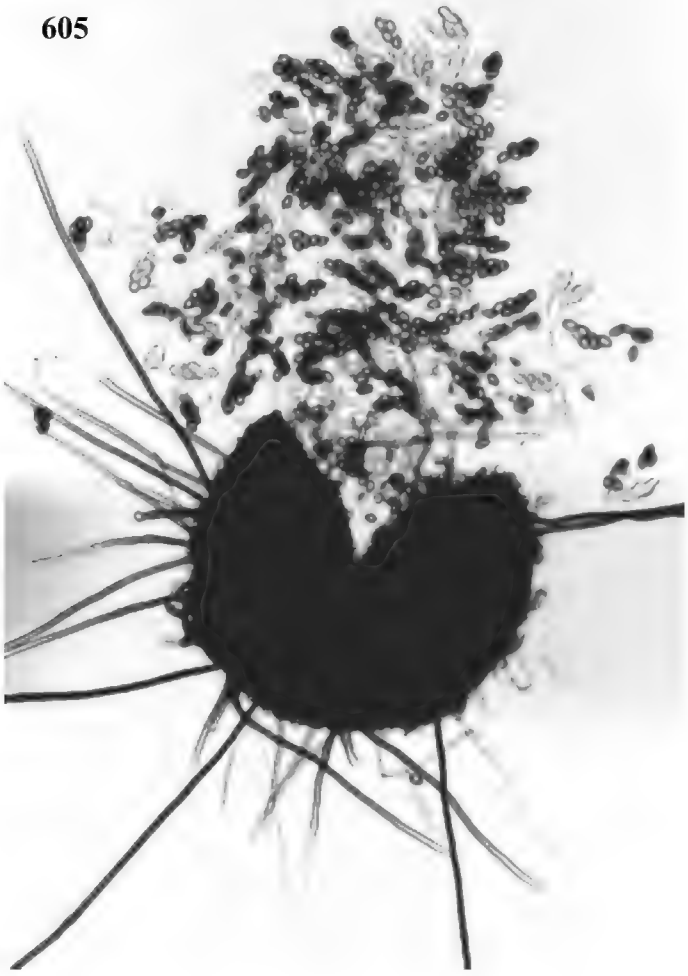
ICO

P604: ascomata on CMA, x 40.
P605: a squashed ascoma, x 200.
P607: peridium in surface view, x 1000.
P608: young asci, x 1000.
P609: young ascospores, x 1000.
P610: mature ascospores, x 1000.
F851: near mature asci, showing only outline, x 1000. (in p. 206)
F852: top, young ascospores, x 1000; middle, near mature ascospores; bottom, fully matured ascospores. (in p. 206)



604

605



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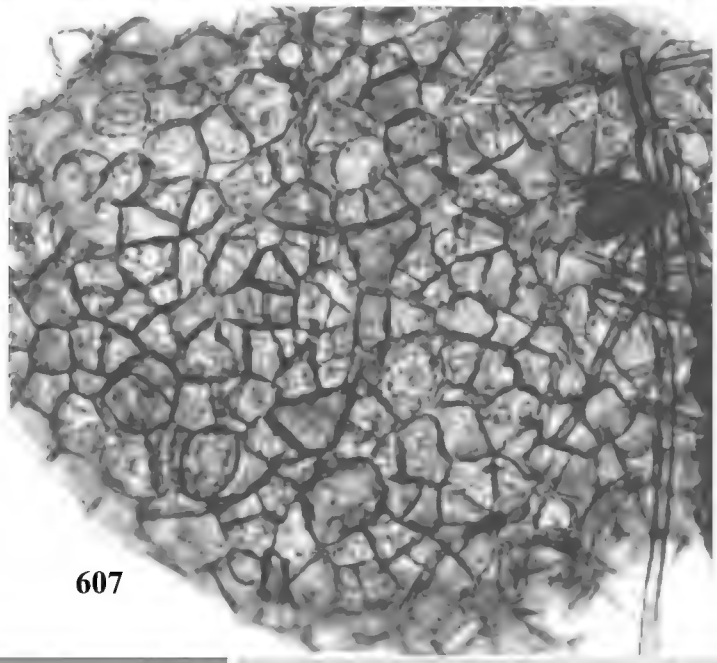
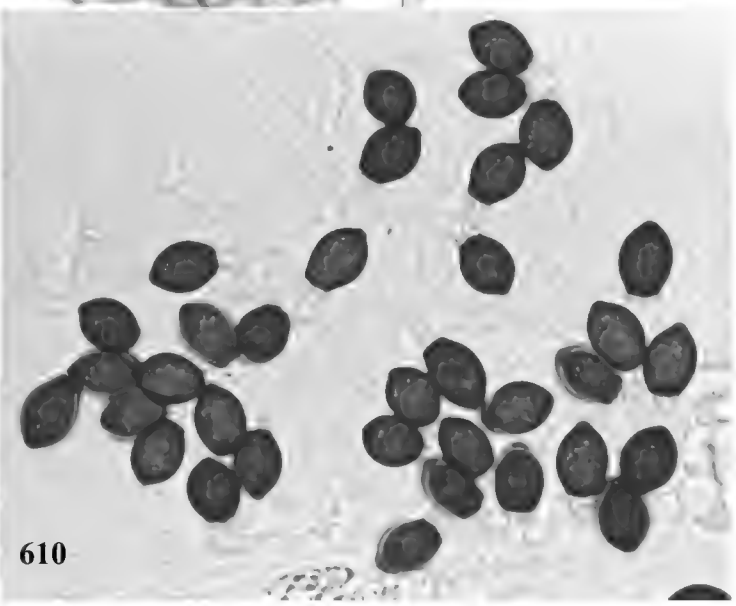


607

609



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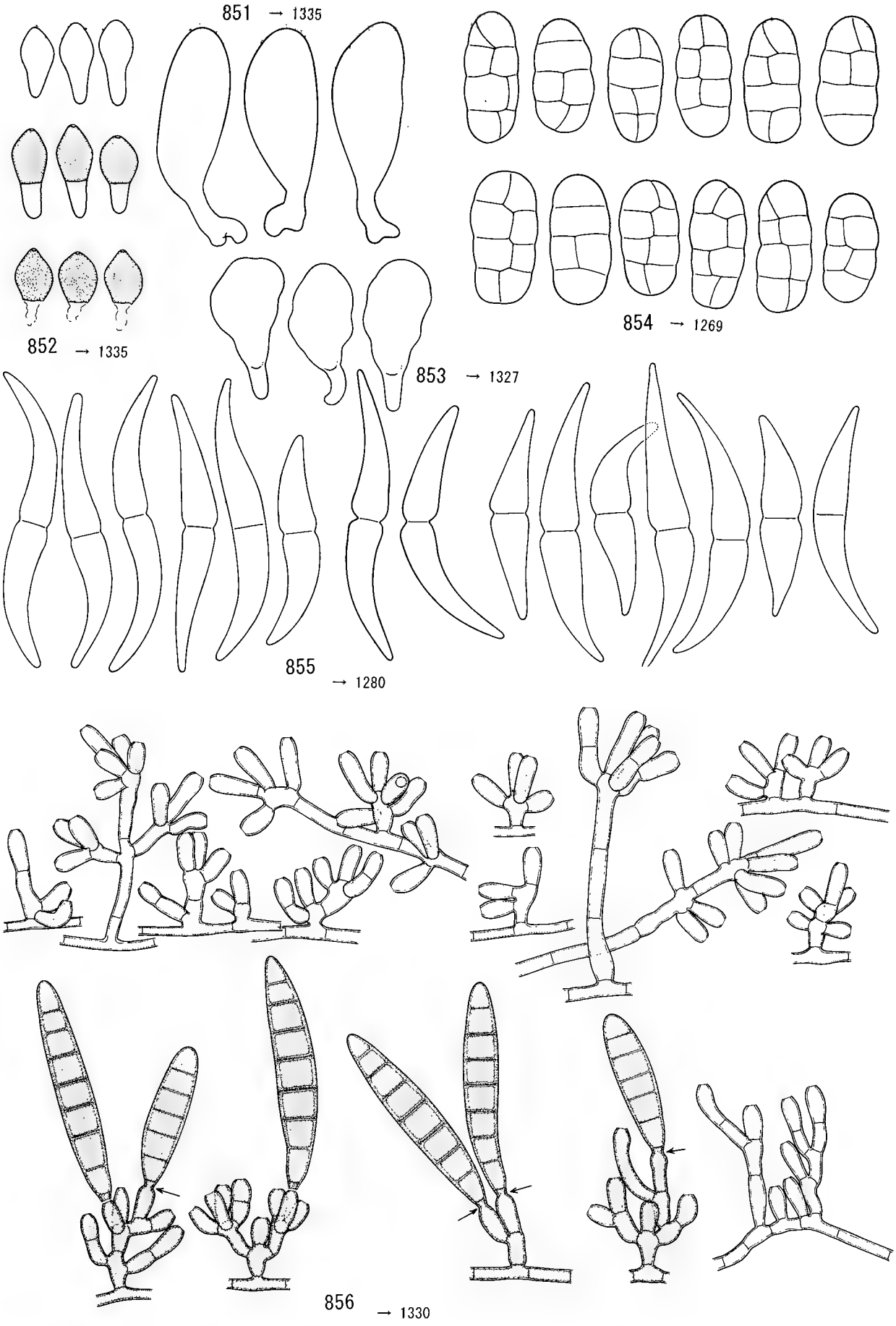
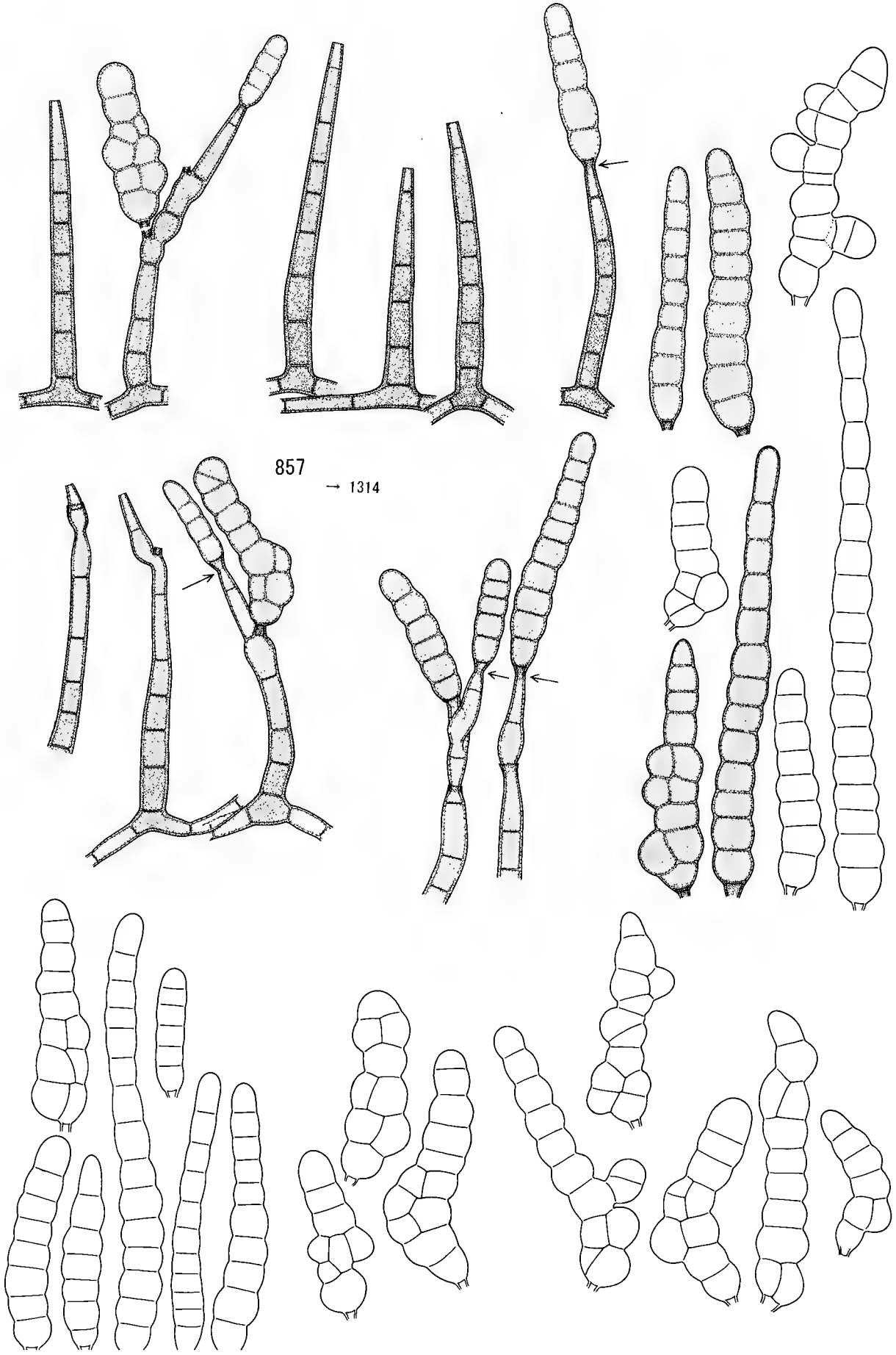
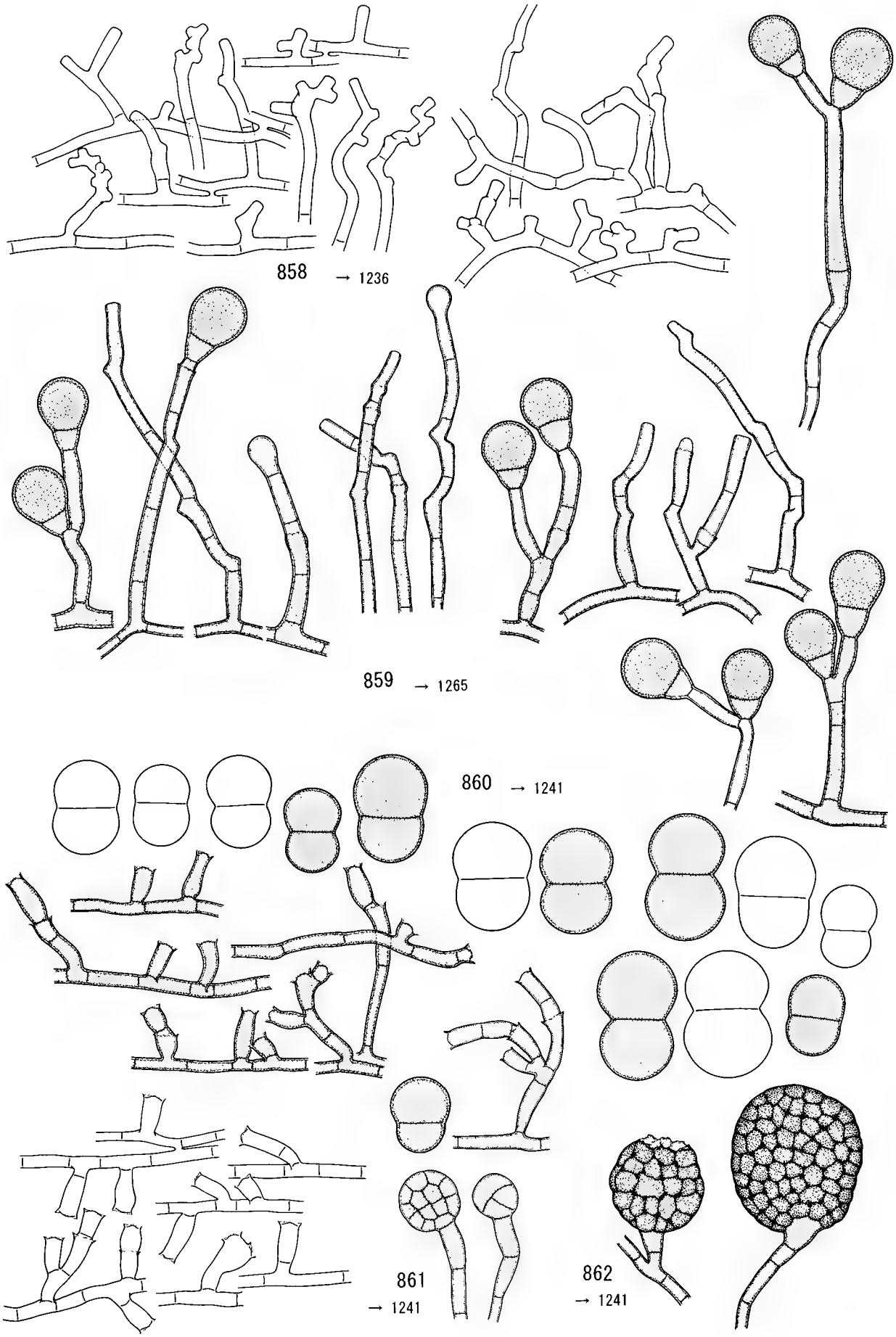
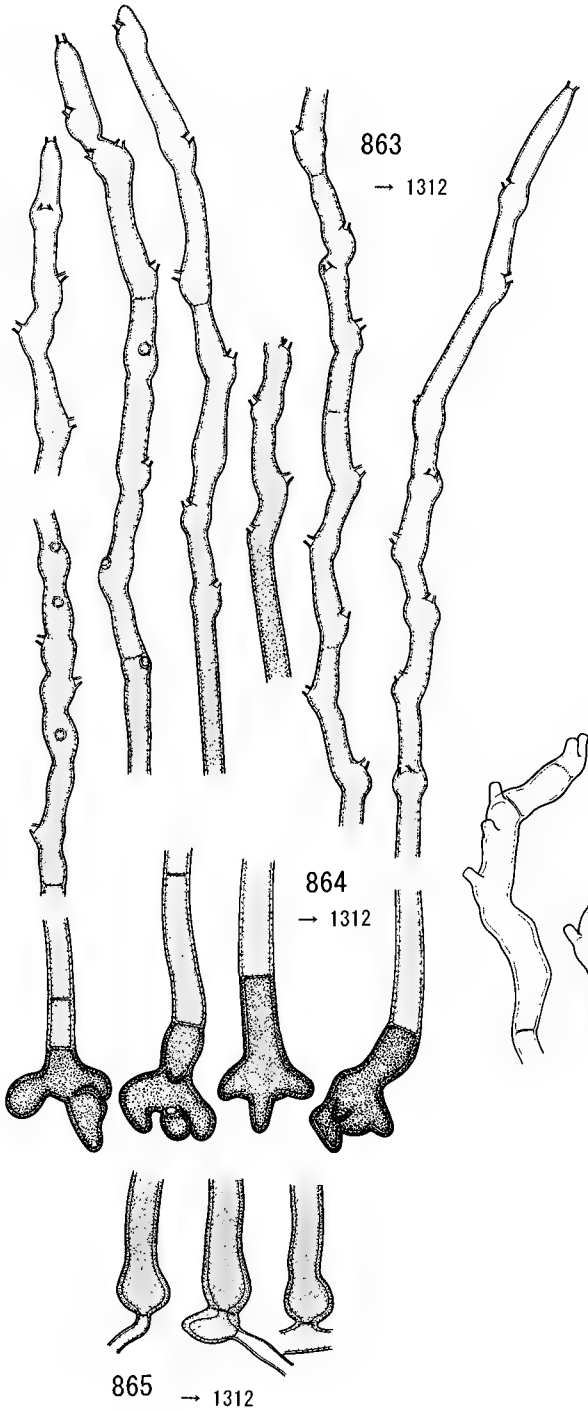
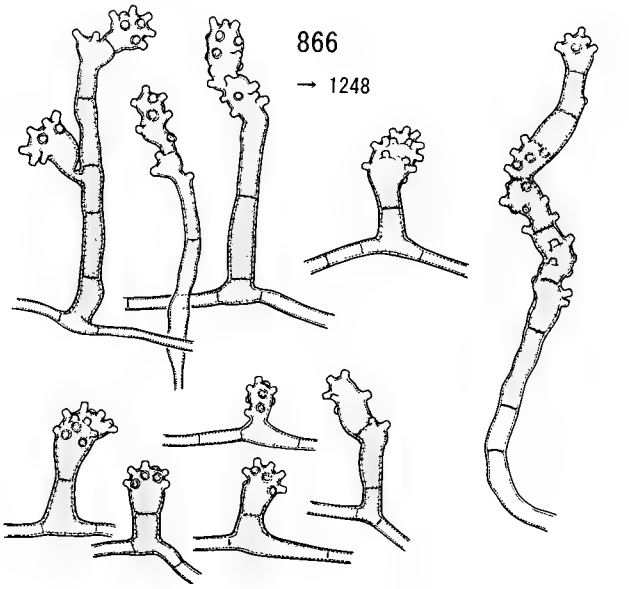
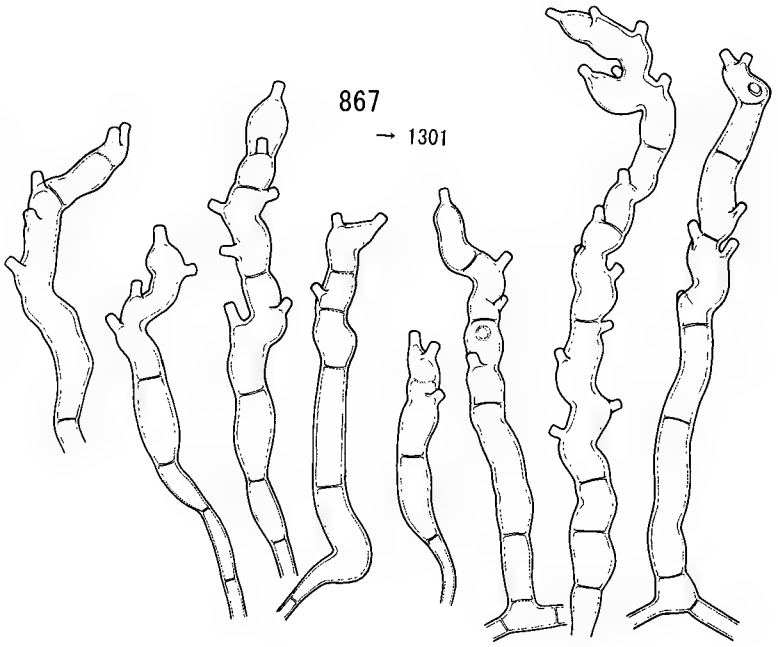

851 → 1335
852 → 1335
853 → 1327
854 → 1269
855 → 1280
856 → 1330

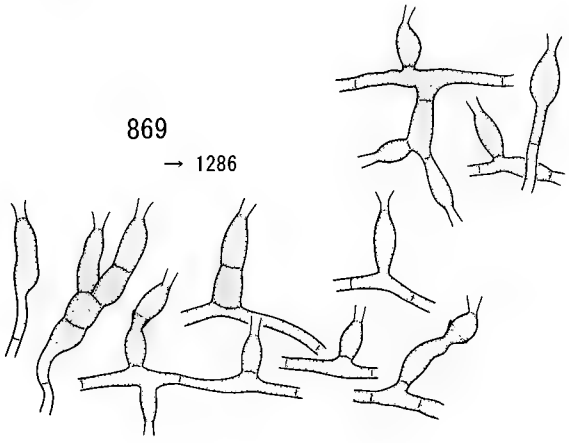

857
→ 1314

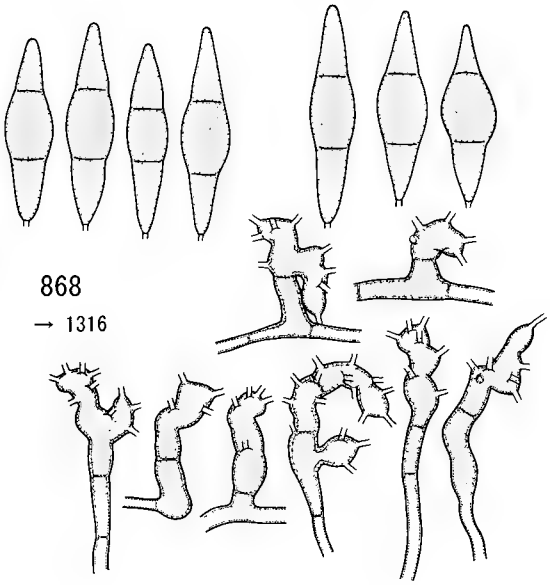

858 → 1236
859 → 1265
860 → 1241
861 → 1241
862 → 1241

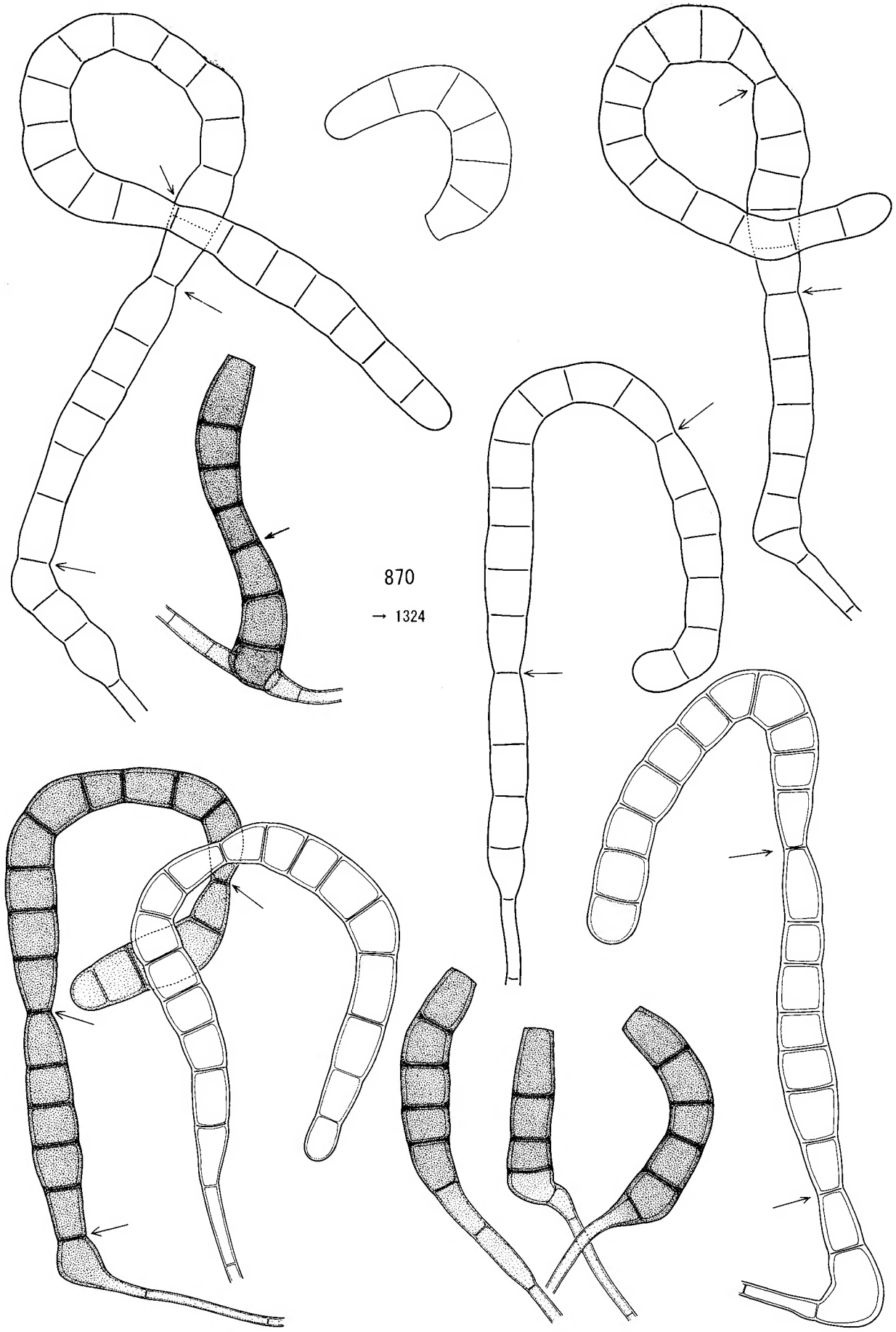

863
→ 1312
864
→ 1312
865
→ 1312

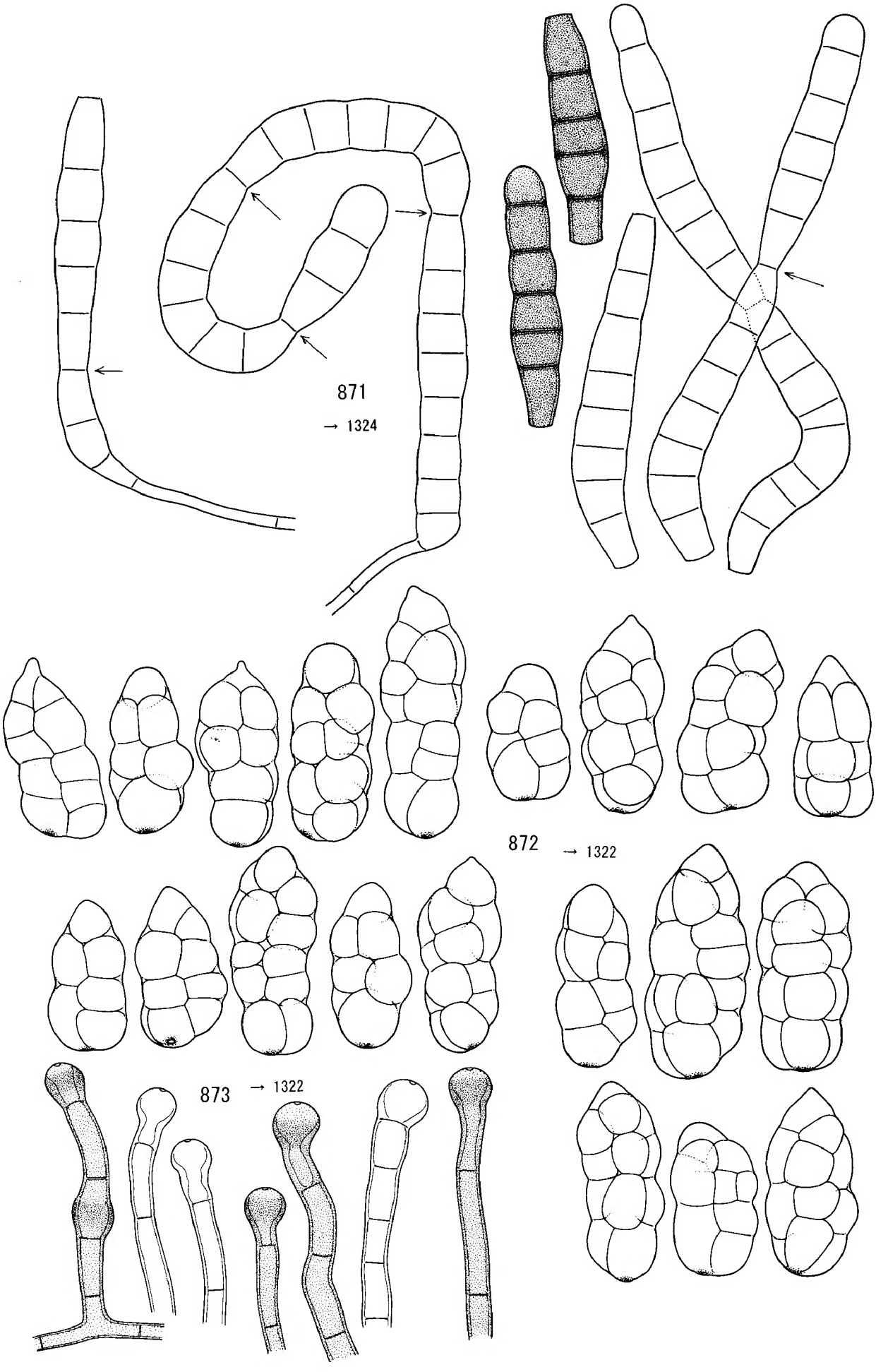

866
→ 1248

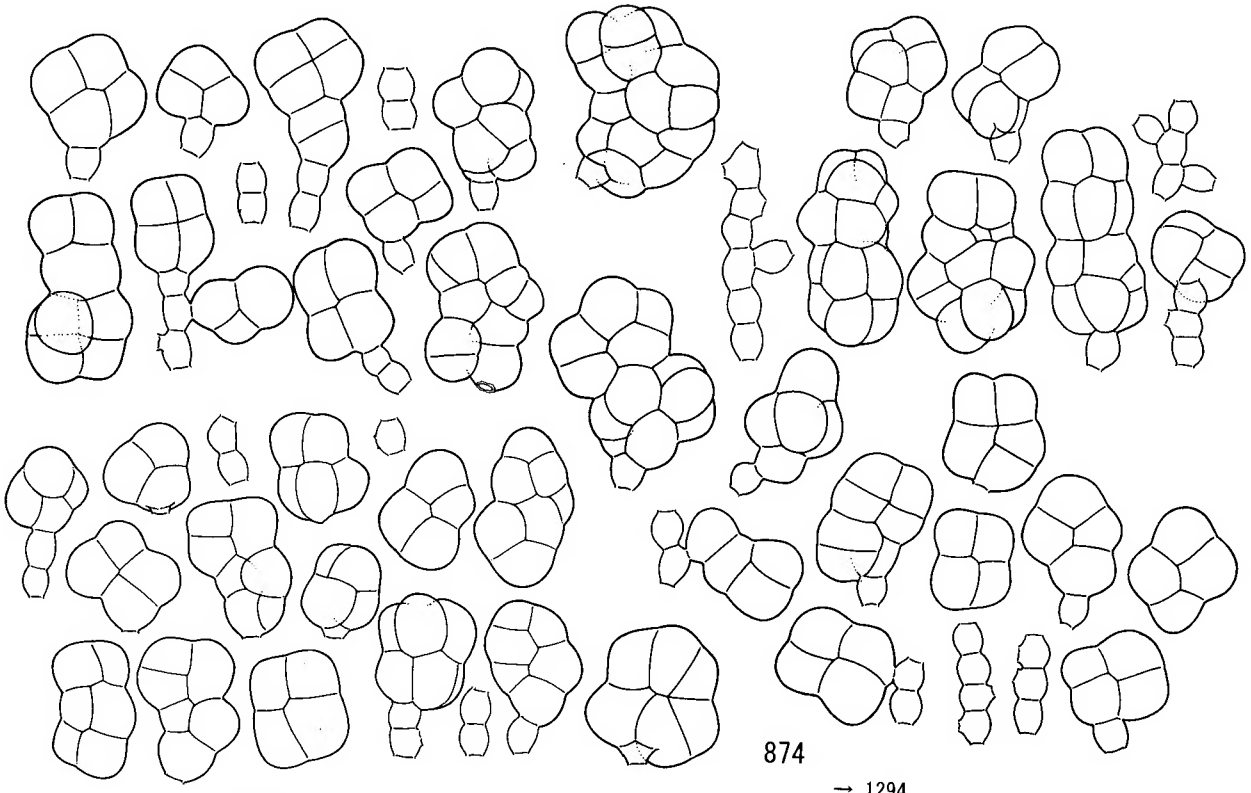

867
→ 1301


869
→ 1286


868
→ 1316

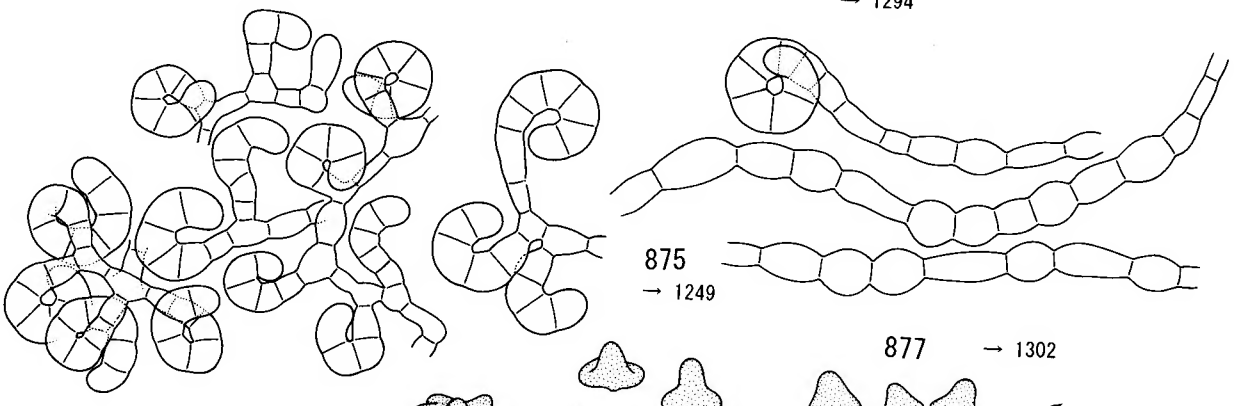

870
→ 1324


871
→ 1324
872
→ 1322
873
→ 1322



874

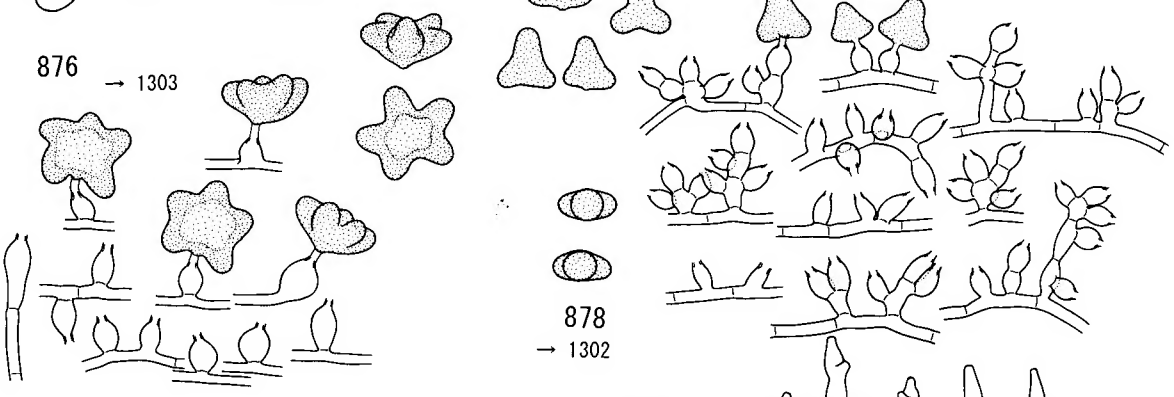
→ 1294



875

→ 1249

877 → 1302



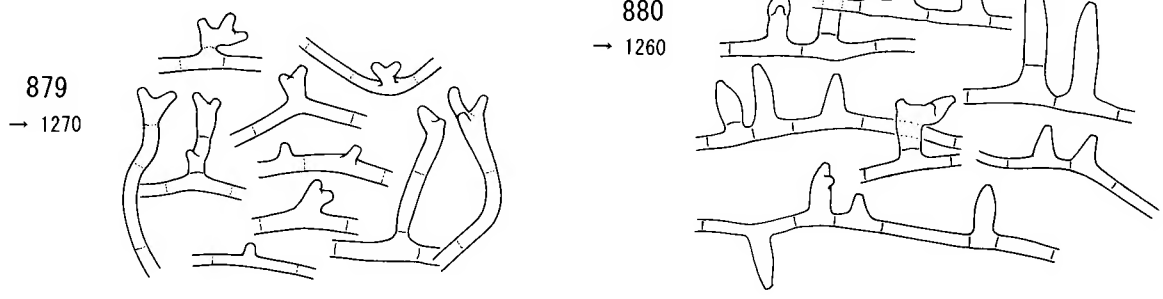
876 → 1303

878

→ 1302

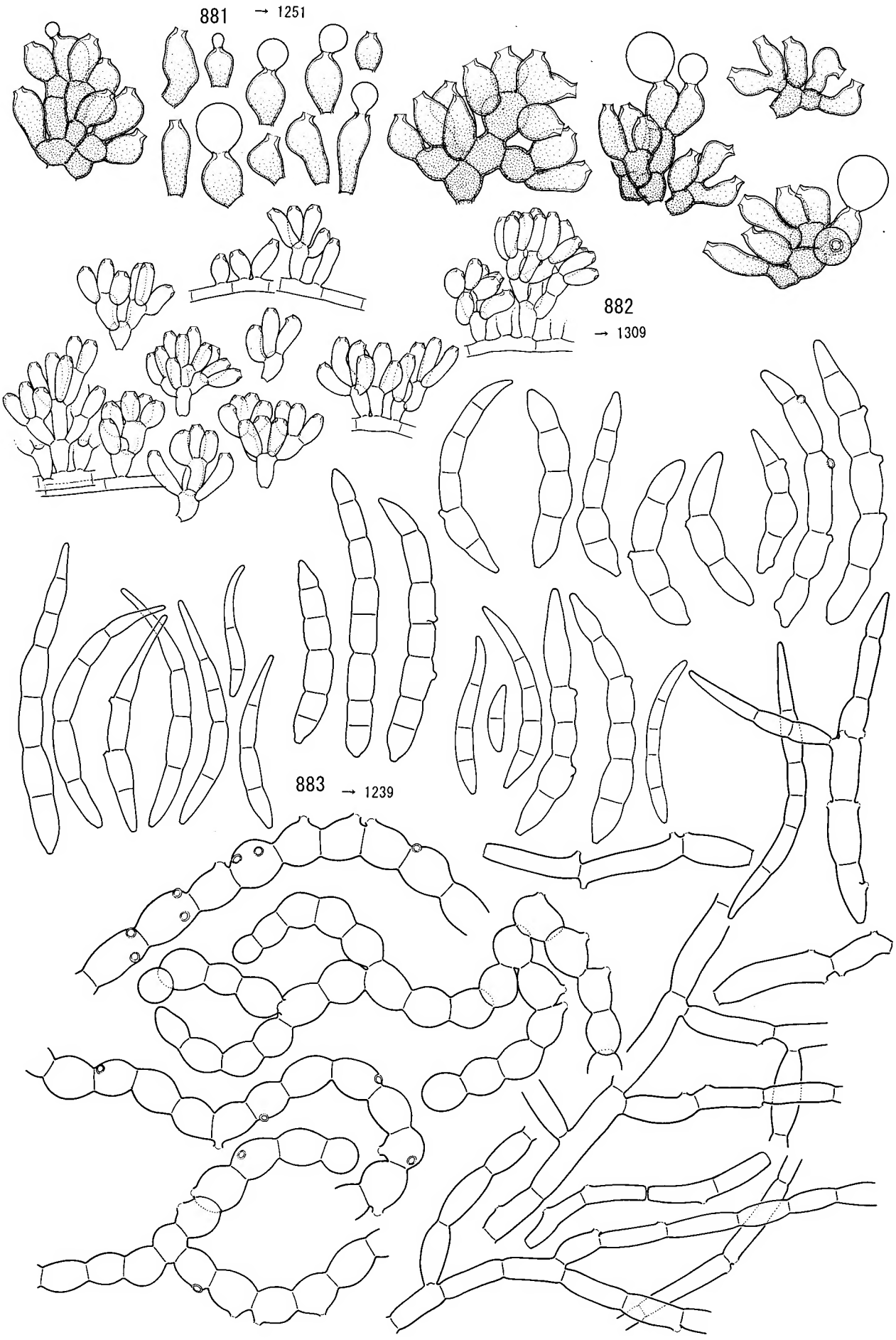
880

→ 1260



879

→ 1270


881 → 1251
882
→ 1309
883 → 1239